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ANNOUNCEMENT  
OF THE  
MEDICAL SCHOOL  
LONGWOOD AVENUE, BOSTON, MASS.  
OF  
HARVARD UNIVERSITY  
FOR  
1916-17

WITH AN ANNOUNCEMENT FOR 1917-18



PUBLISHED BY THE UNIVERSITY

1916							1917													
JULY							JANUARY							JULY						
Su	Mo	Tu	W	Th	Fr	Sa	Su	Mo	Tu	W	Th	Fr	Sa	Su	Mo	Tu	W	Th	Fr	Sa
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15	16	17	18	19	20	21	15	16	17	18	19	20	21	14	15	16	17	18	19	20
22	23	24	25	26	27	28	22	23	24	25	26	27	28	21	22	23	24	25	26	27
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12	13	14	15	16	17	18	13	14	15	16	17	18	19	11	12	13	14	15	16	17
19	20	21	22	23	24	25	20	21	22	23	24	25	26	18	19	20	21	22	23	24
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10	11	12	13	14	15	16	10	11	12	13	14	15	16	9	10	11	12	13	14	15
17	18	19	20	21	22	23	17	18	19	20	21	22	23	16	17	18	19	20	21	22
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## MEDICAL SCHOOL CALENDAR

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### 1916.

- Sept. 13, Wednesday.* Examinations begin for applicants for advanced standing, and for men previously conditioned.
- Sept. 25, Monday.* **Academic Year begins.** Registration of Students. Payment of the first instalment of the tuition-fee is required on or before this date.
- Oct. 12, Thursday.* Columbus Day : a holiday.
- Nov. 30, Thursday.* Thanksgiving Day : a holiday.
- Dec. 8, Friday.* Last day for receiving applications for the Cheever, Haven, and Hayden Scholarships.
- Dec. 29, Friday.* Last day for receiving dissertations for the Boylston Medical Prizes.

RECESS FROM DEC. 23, 1916, TO JAN. 2, 1917, INCLUSIVE

### 1917.

- Jan. 15, Monday.* Last day for receiving applications from students in the Professional Schools to be qualified for the degrees of Ph.D. and A.M. in 1917.
- Jan. 25, Thursday.* Mid-year Examinations begin.
- Jan. 29, Monday.* Payment of the second instalment of the tuition-fee is required on or before this date.
- Feb. 1, Thursday.* **Second half-year begins.**
- Feb. 22, Thursday.* Washington's Birthday : a holiday.
- April 2, Monday.* Last day for receiving dissertations for the Bowdoin Prizes.

RECESS FROM APRIL 15 TO APRIL 21, INCLUSIVE

- May 1, Tuesday.* Last day for receiving dissertations for the Dante, Toppan, and Sumner Prizes.
- May 1, Tuesday.* Last day for receiving applications for the Bullard Fellowships and the Moseley Travelling Fellowships.

- May 1, Tuesday.* Last day for receiving applications for Scholarships for 1917-18 (except the Cheever, Haven, and Hayden Scholarships).
- May 1, Tuesday.* Last day for receiving applications of candidates for the degree of M.D. in 1917.
- May 30, Wednesday.* Memorial Day: a holiday.
- June 1, Friday.* Examinations begin.
- June 21, Thursday.* Commencement.
- SUMMER VACATION, FROM COMMENCEMENT TO SEPTEMBER 23, INCLUSIVE
- Sept. 12, Wednesday.* Examinations begin for applicants for advanced standing, and for men previously conditioned.
- Sept. 24, Monday.* Academic Year begins. Registration of Students. Payment of the first instalment of the tuition-fee is required on or before this date.
- Oct. 12, Friday.* Columbus Day: a holiday.
- Nov. 29, Thursday.* Thanksgiving Day: a holiday.
- Dec. 10, Monday.* Last day for receiving applications for the Cheever, Haven, and Hayden Scholarships.

# THE PRESIDENT AND FELLOWS OF HARVARD COLLEGE

---

This Board is commonly known as the CORPORATION.

---

## PRESIDENT

ABBOTT LAWRENCE LOWELL, A.B., LL.B., LL.D., PH.D.  
17 Quincy St., Cambridge

## FELLOWS

HENRY PICKERING WALCOTT, A.B., M.D., LL.D.  
11 Waterhouse St., Cambridge

HENRY LEE HIGGINSON, A.M., LL.D. 44 State St., Boston

THOMAS NELSON PERKINS, A.B., LL.B. 60 State St., Boston

ROBERT BACON, A.B., LL.D. 1 Park Ave., New York, N. Y.

WILLIAM LAWRENCE, A.B., D.D., LL.D., D.C.L.  
122 Commonwealth Ave., Boston

## TREASURER

CHARLES FRANCIS ADAMS, A.B., LL.B. 50 State St., Boston

## DEPUTY TREASURER

GORHAM BROOKS, A.B. 50 State St., Boston

## SECRETARIES TO THE CORPORATION

FRANCIS WELLES HUNNEWELL, 2d, A.B., LL.B.  
5 University Hall, Cambridge

ROGER PIERCE, A.B. 5 University Hall, Cambridge

## THE BOARD OF OVERSEERS

---

The PRESIDENT and TREASURER of the University, *ex officio*, and the following persons by election : —

### 1917\*

GEORGE VON LENGERKE MEYER, A.B., LL.D., *President*, Hamilton  
WILLIAM COWPER BOYDEN, A.B., LL.B.

1130 Corn Exchange Bank Building, Chicago, Ill.

HENRY CABOT LODGE, PH.D, LL.B., LL.D. Washington, D.C.

LAWRENCE EUGENE SEXTON, A.B., LL.B.

34 Pine St., New York, N.Y.

WILLIAM ENDICOTT, A.B.

115 Devonshire St., Boston

### 1918

AUGUSTUS EVERETT WILLSON, A.M., LL.D.

1423 Fourth St., Louisville, Ky.

LOUIS ADAMS FROTHINGHAM, A.B., LL.B.

911 Barristers Hall, Boston

OWEN WISTER, A.M., LL.B., LL.D., L.H.D.

1004 West End Trust Building, Philadelphia, Pa.

FREDERIC ADRIAN DELANO, A.B.

288 Treasury Building, Washington, D.C.

THOMAS WILLIAM LAMONT, A.B. 23 Wall St., New York, N.Y.

### 1919

GEORGE HERBERT PALMER, A.M., LL.D., LITT.D., L.H.D.

11 Quincy St.

WILLIAM ROSCOE THAYER, A.M., LL.D., LITT.D., L.H.D.

8 Berkeley St.

FREDERICK CHEEVER SHATTUCK, A.M., M.D., LL.D., S.D.

135 Marlborough St., Boston

LANGDON PARKER MARVIN, A.M., LL.B.

52 Wall St., New York, N.Y.

FREDERICK PERRY FISH, A.B.

84 State St., Boston

\* The term expires, in each case, on Commencement Day of the year indicated.

## 1920

- WILLIAM CAMERON FORBES, A.B., LL.D.  
199 Washington St., Boston  
EVERT JANSEN WENDELL, A.B. 15 W. 38th St., New York, N.Y.  
THOMAS WILLIAMS SLOCUM, A.B. 11 Thomas St., New York, N.Y.  
JOHN WHITE HALLOWELL, A.B. Milton  
EDGAR CONWAY FELTON, A.B. Haverford, Pa.

## 1921

- ROBERT GRANT, Ph.D., LL.B. 211 Bay State Road, Boston  
ROBERT FREDERICK HERRICK, LL.B., A.B. Ruggles Lane, Milton  
WILLIAM DEWITT HYDE, A.B., D.D., LL.D. Brunswick, Me.  
WILLIAM SYDNEY THAYER, A.B., M.D., LL.D.  
406 Cathedral St., Baltimore, Md.  
DWIGHT FILLEY DAVIS, A.B., LL.B.  
16 Portland Place, St. Louis, Mo.

## 1922

- HOWARD ELLIOTT, C.E. South Station, Boston  
JOHN PIERPONT MORGAN, A.B. 23 Wall St., New York, N.Y.  
WILLIAM THOMAS, A.B., LL.B. 310 Sansome St., San Francisco, Cal.  
FRANCIS LEE HIGGINSON, JR., A.B. 44 State St., Boston  
ELIOT WADSWORTH, A.B. 1718 H St., Washington, D.C.

---

SECRETARY OF THE BOARD OF OVERSEERS

- WINTHROP HOWLAND WADE, A.M., LL.B. 99 State St., Boston

## MEDICAL SCHOOL

---

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	ADDRESS†
ABBOTT LAWRENCE LOWELL, LL.B., LL.D., PH.D., PRESIDENT,	17 Quincy St., Cambridge.
EDWARD H. BRADFORD, M.D., DEAN,	133 Newbury St.
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WILLIAM F. WHITNEY, M.D., <i>John Barnard Swett Jackson Curator of the Warren Anatomical Museum,</i>	Harvard Medical School.
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GEORGE G. SEARS, M.D., <i>Clinical Professor of Medicine,</i>	426 Beacon St.
WILLIAM P. COOKE, D.M.D., <i>Professor of Prosthetic Dentistry,</i>	330 Dartmouth St.
ALGERNON COOLIDGE, M.D., <i>Professor of Laryngology,</i>	613 Beacon St.
ROBERT W. LOVETT, M.D., <i>John B. and Buckminster Brown Professor of Orthopedic Surgery,</i>	234 Marlborough St.

\* Arranged, with the exception of the President, Dean, and Secretary, on the basis of collegiate seniority.

† The address is Boston, unless otherwise stated.



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*Adviser to Students in Harvard College preparing for the study of Medicine*: WALTER B. CANNON, M.D.

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*Chief Clerk in the Dean's Office*: HELEN G. MEDBURY.

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*The Dean's Office* is in the Administration Building of the Medical School, Room 104. It is open daily from 9 to 1 and from 2 to 5, except on Saturdays, Sundays, and holidays; on Saturdays it is open from 9 to 1. Those seeking information about the Medical School should inquire at this office.

*The Bursar's Office* is in Dane Hall, Harvard University, Cambridge. It is open daily, except Sundays and holidays, from 9 to 1, for the receipt of fees, payments, and other financial business. A representative of the Bursar will be in the Administration Building at the Medical School at stated hours on certain days at the opening of each term for the receipt of fees from regular students.

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# HARVARD MEDICAL SCHOOL

## BOSTON

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### GENERAL STATEMENT

The Harvard Medical School started as a branch of the University in 1782 when three professorships of medicine were established. The first degrees in medicine were conferred in 1788. Before 1811, the degree conferred was that of Bachelor of Medicine; after that date the degree of Doctor of Medicine was established. The first Medical School was built in Boston in 1815. In 1906, the Medical School moved into its quarters on Longwood Avenue. For the construction and endowment of these buildings the School is indebted to the generosity of Mrs. Collis P. Huntington, Messrs. J. Pierpont Morgan, John D. Rockefeller, David Sears, and a number of other benefactors. A number of hospitals have been constructed on the grounds adjacent to the Medical School. A statement in regard to these hospitals and the other hospitals in which teaching is done will be found on pages 88-91 of this catalogue.

In 1910, under the supervision of the Department of Preventive Medicine and Hygiene, courses leading to a degree of Doctor of Public Health were established.

In 1912 the Graduate School of Medicine was established to take charge of the graduate instruction throughout the year, which had previously been given by the Harvard Medical School under the Courses for Graduates and the Summer School of Medicine. The Graduate School of Medicine will also take charge of all special students who are not candidates for the degree of Doctor of Medicine. The School of Tropical Medicine also offers instruction in the Medical School.

The academic year begins on the Monday preceding the last Wednesday in September, and ends on the Thursday preceding the last Wednesday in June. There is a Christmas recess from December 23 to January 2 inclusive, and a recess of one week's duration in April.



## BUILDINGS AND HOSPITAL FACILITIES

The Medical School buildings occupy eleven acres on Longwood Avenue, Boston and are five in number: one is designed for administrative and four for laboratory purposes. The administration building contains the necessary offices, several lecture rooms, and the Warren Anatomical Museum. The laboratory buildings provide extensive accommodations for various departments grouped in the buildings as follows:— (1) anatomy, comparative anatomy, histology and embryology; (2) physiology, comparative physiology, biological chemistry, and theory and practice of physic; (3) pathology, bacteriology, neuropathology, surgical pathology and tropical medicine; (4) preventive medicine and hygiene, pharmacology, comparative pathology, and surgery.

The laboratory buildings are all constructed on one general plan, — two parallel wings united by an amphitheatre. The rooms in the various wings have been designed on a unit system, which will greatly simplify any changes required by future growth or by uses other than those for which the rooms were originally designed. These buildings provide an equipment for teaching and research in various branches of medical science which as a whole is probably unequalled.

At the present time the clinical instruction is carried on in the wards and out-patient departments of the Peter Bent Brigham Hospital, Infants' Hospital (Rotch Memorial), Children's Hospital, and Collis P. Huntington Memorial Hospital, located on grounds adjacent to the Medical School; the Massachusetts General Hospital, Boston City Hospital, Boston Lying-in Hospital, Boston Dispensary, McLean Hospital, Boston State Hospital, Psychopathic Hospital, Massachusetts Charitable Eye and Ear Infirmary, Free Hospital for Women. For a detailed statement of these hospitals, see page 88.

# HARVARD MEDICAL SCHOOL BOSTON

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## REQUIREMENTS FOR ADMISSION

As candidates for the Degree of Doctor of Medicine the School receives the following:

I. Graduates in arts or science of approved colleges or scientific schools \* who can furnish evidence

(a) That they have such knowledge of physics, of biology, of general inorganic chemistry, and of organic chemistry,† as may be obtained from one year's course in each of these subjects as given in approved colleges and scientific schools.

(b) That they have a reading knowledge of French or German.

II. Students who have completed two years of work in a college or scientific school of high rank, provided they present certificates (1) that they have stood in the upper third of their class, (2) that one year's course has been taken in physics, in biology, and in general inorganic chemistry and in organic chemistry, and (3) that they have a reading knowledge of French or German.

These requirements are to be satisfied in full before matriculation.

Partial deficiencies in single subjects may be made up prior to admission by courses in the Harvard Summer School.

Students are requested to apply for admission before July 1st on registration blanks to be furnished by the Secretary.

Students registering in the Medical School for the first time will meet in the amphitheatre in the Administration Building, on Monday, preceding the last Wednesday in September, at 10 A.M.

The Administrative Board reserves the right in its discretion to refuse applicants if the number admitted is as large as can be effectively taught.

\* It is assumed that before admission to an acceptable college a four years' course in High School or its equivalent will have been completed.

† Courses in physics, general inorganic chemistry and biology (at least one half of which should be zoölogy) should consist of approximately 160 total hours each, or 8 "semester hours"; courses in organic chemistry should consist of approximately 90 total hours, or 4 "semester hours"; all courses should include satisfactory laboratory work.

## ADMISSION TO ADVANCED STANDING

Students who began their professional studies in other approved medical schools may be admitted to advanced standing and become candidates for the degree of M.D. under the following conditions:—

They must have fulfilled the requirements for admission enumerated under I or II.

They must furnish a satisfactory certificate of time spent in medical study, successfully completed, at least equal to that spent by the class to which they seek admission.

They must furnish satisfactory certificates that they have done satisfactory laboratory and practical work in the subjects already pursued by the class to which they seek admission.

They must pass examinations, or receive credit for all courses required to have been passed by the class which they seek to enter.

Before they can be admitted to the third or fourth class they must pass the first general examination.

Graduates of other medical schools of recognized standing may be admitted to advanced standing in accordance with the above regulations.

The minimum time of residence at this School for candidates for the degree of M.D. shall be one year; all candidates for the degree of M.D. must perform in full the work of the fourth year of the regular curriculum.

## DIVISION OF STUDENTS

Students are divided into four classes according to their time of study and proficiency. No student may advance with his class, or be admitted to advanced standing, until he has passed the required practical examinations in the studies of the previous year, or a majority of them; nor may he become a member of the third class, until he has passed the first general examination.

*No student will be permitted to continue his membership in the School, if at the beginning of his second year he has failed in three or all of the practical examinations on first-year subjects.*

*In order that the time of study shall count as a full year, students of all classes must register at the Dean's office on Monday, the first day of the academic year.*

*Students are required not to engage as hospital assistants during term time, except in so far as required by the School curriculum.*

Any student may obtain a certificate of his period of connection with the School.

The Faculty reserves the right to require the withdrawal of any student at any time whenever in the opinion of his instructors it is manifest that he is incompetent for his work, or for any reason he is unfitted to continue his course.

### EXAMINATIONS

Each student will receive a rating in each course based upon practical examinations or other tests as determined by each Department. Two general examinations will be required of the candidate for the M.D. degree, the first after the completion of the second year, and the second after the completion of the fourth year of medical study. Each consists of a written examination given in two periods on two successive days supplemented, if required, by an oral examination.

For the first general examination the student may choose either June or September, but no student will be admitted to this examination until he has completed the courses included in the examination, and has received satisfactory ratings in these various courses. The subjects comprised in the first general examination will be Anatomy, Histology and Embryology, Physiology, Biological Chemistry, Pathology, Pharmacology, Bacteriology, Physical Diagnosis, Clinical Pathology, Surgical Pathology, and Surgical Technique.

For the second general examination the student may choose either June or January, but no student will be admitted to this examination until he has passed satisfactorily the first general examination, has completed four years of medical study in four different calendar years, including the regular fourth-year course of study at the Harvard Medical School, has completed the courses included in this examination, and has received satisfactory ratings in these courses. The subjects comprised in the second general examination will be Preventive Medicine and Hygiene, Medicine, Surgery, Pediatrics, Obstetrics, Gynaecology, Dermatology, Syphilis, Neurology, Psychiatry, Ophthalmology, Otology and Laryngology.

*Any student who fails three times in a general examination will be debarred from further attempts.*

*If a portion of the general examination (written or oral) is taken by a student, this will constitute an attempt to pass the examination. Failure to complete all parts, unless prevented by illness, shall be regarded as a failure to pass.*

In addition to the above examinations every student is required :—

To dissect the three parts of the body to the satisfaction of the demonstrator;

To take charge of and report on six cases in Obstetrics, under supervision and instruction;

To furnish satisfactory evidence of having engaged in the practical exercises in Medicine and Surgery.

No student is allowed to anticipate the examinations in the regular course of studies of his year, except by special permission of the Faculty.

After two failures to pass a practical examination, each student must pay a fee of three dollars at the Dean's office before appearing for each additional practical examination in the same subject.

## DEGREES

### DEGREE OF DOCTOR OF MEDICINE

Every candidate for the degree of DOCTOR OF MEDICINE at this University must be at least twenty-one years of age, and of good moral character. He must fulfil all the requirements for admission to this Medical School; must give evidence of having studied in a recognized Medical School at least four full years, of which one year must be spent in the regular fourth-year course of this School; must pass all the required examinations, and fulfil satisfactorily the special requirements enumerated above.

The degree of Doctor of Medicine will be given to those candidates who fulfil the above requirements. The degree of Doctor of Medicine *cum laude* will be given to candidates entering the Medical School previous to 1912-13 who have obtained an average of eighty per cent, or over, in all the required examinations.

Candidates entering the Medical School in and after 1912-13, who pass the final general examination with honor, shall receive the degree of Doctor of Medicine *cum laude*, and candidates who pass both general examinations with honor shall receive the degree of Doctor of Medicine *magna cum laude*.

For special and approved purposes students may be allowed to take a portion of their work elsewhere than at the Harvard Medical School, provided that it be determined by the Dean, in consultation with the Administrative Board and the head of a Department, that this may be allowed, and provided that the student pass an examination on this work after its completion conducted by a member of the Faculty of the Harvard Medical School.

Candidates for the degree must make application for it in writing, on blanks furnished at the Dean's office, on or before *May 1* of the year in which they propose to graduate.



## DEGREE OF DOCTOR OF PUBLIC HEALTH

The degree of Doctor of Public Health is open to holders of the degree of Doctor of Medicine from the Harvard Medical School or other recognized Medical Schools, and to other properly qualified persons. Candidates for the degree of Doctor of Public Health must spend not less than one year in work upon a special subject, approved by the Committee on the Degree of Doctor of Public Health, and present a thesis containing some original research acceptable to the Faculty of Medicine. Candidates for this degree may be given credit for any course offered in any department of the University, provided it has the approval of the Faculty of Medicine, and candidates from other institutions may be admitted to advanced standing. A minimum of one year in residence shall be required of all candidates for the degree of Doctor of Public Health. Information in regard to this degree may be had from Professor M. J. ROSENAU, Chairman of the Committee on the Degree of Doctor of Public Health.

## DEGREES OF MASTER OF ARTS AND DOCTOR OF PHILOSOPHY

There has been established within the Faculty of Arts and Sciences a Division of Medical Sciences consisting of members of the Faculties of Medicine and of Arts and Sciences, who are to recommend candidates for the degrees of A.M. and Ph.D. to the Faculty of Arts and Sciences. Work in Medical Sciences leading to these degrees may be carried on in several of the laboratories of the Medical School by properly qualified students.

Candidates for the degree of Master of Arts must be Bachelors of Arts of Harvard College, or Bachelors of Arts of other Colleges who shall be recommended by the Faculty of Arts and Sciences. Candidates must pursue an approved course of study in medical science for at least one year.

Candidates for the degree of Doctor of Philosophy must fulfil certain preliminary requirements, must devote to approved advanced studies not less than two years — at least one of which must be spent in residence at this University, and must pass general examinations and present an account of original work in an accepted thesis, before being granted the degree.

Further information concerning these degrees may be obtained from Assistant Professor LAWRENCE J. HENDERSON, Chairman of the Division of Medical Sciences, 4 Willard Street, Cambridge, Mass.

## FEES AND EXPENSES

## DEGREE OF DOCTOR OF MEDICINE

The fees are :—For matriculation, five dollars ; for instruction (including laboratory charges except breakage, damage and loss of apparatus), two hundred and twenty-five dollars for each year (if in two payments, at the first, one hundred and thirty-five dollars ; at the second, ninety dollars) ; for a half-year alone, one hundred and thirty-five dollars.\* The matriculation fee and the instruction fee (if in two payments, the first instalment thereof) are to be paid to the Bursar† punctually at the beginning of the academic year, without the presentation of a bill ; and the second instalment is to be paid on or before January 31. On or before January 31, first-year students are to make a deposit of ten dollars with the Bursar to cover charges for breakage, damage and loss of apparatus, during the first and second years in accordance with the requirements established by the several departments in which they occur. A student may rent a microscope from the School upon application to the Committee on Microscopes. A deposit of one dollar with the Dean will entitle the student to the use of a locker in the School buildings.

No degree can be conferred until all dues to the University have been discharged. Each student whose dues remain unpaid on the day fixed for their payment is required at once to cease attending lectures and using laboratories or making use of any other privileges as a student until his financial relations with the University have been arranged satisfactorily to the Bursar. Failure to comply with this rule is deemed cause for final separation from the University.

## BOND REQUIRED OF STUDENTS

Every student is required to file with the Bursar on his entrance to the School a bond of *fifty dollars*, executed by two sufficient bondsmen (one of whom must be a citizen of the United States), or to deposit fifty dollars in money, to cover the loss or injury of any property belonging to the University, or for which it is responsible. Blank forms of bonds may be obtained from the Secretary of the Faculty or from the Bursar. No officer or student of the University is accepted as a bondsman. Students will be held responsible for the payment of fees until they have notified the Dean, in writing, of their intention to withdraw from the School and have subsequently received their bond from the Bursar.

\* Students who were members of the School in 1912-13 or earlier will be allowed to complete the course for the fees prescribed in the Catalogue of 1912-13.

† The Bursar's office is in Dane Hall, Harvard Sq., Cambridge. Hours 9-1.

## DEGREE OF DOCTOR OF PUBLIC HEALTH

A fee of \$150 annually is charged for tuition, and \$5 for matriculation. Of this amount, \$95 must be paid to the Bursar at the beginning of the academic year without the presentation of a bill; the remaining \$60 must be paid on or before January 31. No degree can be conferred until all dues to the University have been discharged.

## DEGREES OF MASTER OF ARTS AND DOCTOR OF PHILOSOPHY

For these degrees, a fee of \$150 is charged for tuition, and a graduation fee of \$20. Of this amount, \$90 must be paid to the Bursar at the beginning of the academic year without the presentation of a bill; the remaining \$60 must be paid on or before January 31st. The graduation fee of \$20 must be paid before Commencement. No degree can be conferred until all dues to the University have been discharged.

## STILLMAN INFIRMARY FEE

*Not later than October 5* in each academic year, any student may pay to the Bursar the sum of four dollars for the maintenance of the Stillman Infirmary; and, on the order of a physician, every student who has taken advantage of this opportunity will be given, in case of sickness, in return for the fee, a bed in a ward, board, and ordinary nursing for a period not exceeding two weeks in any one academic year.

## WITHDRAWAL FROM THE SCHOOL

Whenever a student is obliged to withdraw from the School before the last four weeks of a half-year for no misdemeanor, but for good and sufficient reason, to be determined in all cases by the Administrative Board, it shall be recommended that he be entitled to a remission of three-fourths of the amount due for that portion of the time during which he receives no instruction. This remission will date from the reception by the Dean of a written notice of the student's withdrawal from the School. *No degree can be granted until the student has paid the full tuition fee for each year (first, second, third, fourth) in which he has been registered as a member of the School.*

If a student withdraws from the School for part of a year for good and sufficient reason as determined by the Faculty, he may leave his fees deposited with the Bursar to be used at some later date for instruction equivalent to that which he missed by his withdrawal. If a student shortens his four years' work by working in the Summer School of Medicine, he must still pay a full tuition fee for each year he is registered as a member of the School.



## DIVISION OF STUDIES

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH-YEAR ELECTIVES	
<b>ANATOMY</b>	Bacteriology	Medicine	Anatomy 1, 2, and 3	Surgery 1, 2, 3, 4, 5, 6, and 7
<b>HISTOLOGY AND EMBRYOLOGY</b>	Pathology	Surgery	Physiology 1 and 2	Orthopedic Surgery 1 and 2
<b>PHYSIOLOGY</b>	Anatomy	Obstetrics	Comparative Physiology 1 and 2	Obstetrics and Gynaecology 1, 2, and 3
<b>BIOCHEMISTRY</b>	Preventive Medicine and Hygiene	Pediatrics	Biochemistry 1	Dermatology 1, 2, and 3
	Pharmacology	Dermatology	Bacteriology 1	Syphilis 1
	Physical Diagnosis	Syphilis	Pathology 1, 2, 3, and 4	Neuropathology 1 and 2
	Clinical Pathology	Neurology	Comparative Pathology 1, 2, 3, and 4	Neurology 1
	Surgical Pathology	Psychiatry	Preventive Medicine and Hygiene 1 and 2	Psychiatry 1
	Surgical Technique	Genito-Urinary Surgery	Pharmacology 1	Ophthalmology 1, 2, and 3
	<i>Medicine</i>	<i>Legal Medicine</i>	Medicine 1, 2, 3, 4, 5, and 6	Otology 1, 2, 3, and 4
	<i>Surgery</i>		Tropical Medicine	Laryngology 1, 2, and 3
	<i>Neurology</i>		Roentgenology 1	Combined Course in Specialties * and Surgical Anatomy.
	<i>Dermatology</i>		Pediatrics 1, 2, 3, and 4	Friday afternoons devoted to class exercises.

NOTE.—Subjects not completed in a given year are in *italics*. In the fourth year, electives must be chosen aggregating 1000 hours; both half-courses and quarter-courses are offered occupying 125 and 65 hours respectively.

\* Orthopedic Surgery, Gynaecology, Ophthalmology, Otology, and Laryngology, are specialties given in the fourth year.

## METHODS OF INSTRUCTION

During the first three years the following methods of instruction are adopted in the several departments:—

NOTE.—The figures at the right of the page indicate as accurately as can be ascertained the number of hours of instruction which each student receives in the different courses.

ABBREVIATIONS USED IN THE FOLLOWING PAGES, AND IN THE  
TABULAR VIEWS

B.C.H.	= Boston City Hospital.
B.D.	= Boston Dispensary.
B.S.H.	= Boston State Hospital (Pierce and Austin Farms).
B.L.H.	= Boston Lying-in Hospital.
C.H.	= Children's Hospital.
E. and E.I.	= Massachusetts Charitable Eye and Ear Infirmary.
F.H. for W.	= Free Hospital for Women.
H.M.S.	= Harvard Medical School.
H.M.H.	= Huntington Memorial Hospital.
I.H.	= Infants' Hospital (Rotch Memorial).
McL.H.	= McLean Hospital.
M.G.H.	= Massachusetts General Hospital.
P.B.B.H.	= Peter Bent Brigham Hospital.
P.H.	= Psychopathic Hospital.
S.D.B.C.H.	= South Department, Boston City Hospital.
S.O.P.D.	= Surgical Out-Patient Department.

## Anatomy

— — —, *James Stillman Professor of Comparative Anatomy and Director of the Laboratory of Anatomy.*

DAVID CHEEVER, M.D., *Assistant Professor of Surgical Anatomy and Associate in Surgery.*

JOHN L. BREMER, M.D., *Associate Professor of Histology.*

FREDERIC T. LEWIS, M.D., *Associate Professor of Embryology.*

HARRIS P. MOSHER, M.D., *Assistant Professor of Laryngology and Instructor in Anatomy.*

JOHN WARREN, M.D., *Associate Professor of Anatomy.*

ALEXANDER S. BEGG, M.D., *Instructor in Comparative Anatomy.*

EDWARD A. BOYDEN, A.M., *Instructor in Comparative Anatomy.*

ROBERT M. GREEN, M.D., *Instructor in Anatomy.*

KURT H. THOMA, D.M.D., *Instructor in Dental Anatomy.*

JOHN BRYANT, M.D., *Assistant in Anatomy.*

- ARCHIBALD MCK. FRASER, M.D., *Assistant in Anatomy.*  
DONALD M. GLOVER, A.B., *Assistant in Histology and Embryology.*  
TORR W. HARMER, M.D., *Assistant in Anatomy.*  
GEORGE A. LELAND, M.D., *Assistant in Anatomy.*  
ANDREW R. MACAUSLAND, M.D., *Assistant in Anatomy.*  
FRANK W. MARVIN, M.D., *Assistant in Anatomy.*  
RICHARD H. MILLER, M.D., *Assistant in Anatomy.*  
WILLIAM R. MORRISON, M.D., *Assistant in Anatomy.*  
GEORGE W. MORSE, M.D., *Assistant in Anatomy.*  
EDWARD H. RISLEY, M.D., *Assistant in Anatomy.*  
ALBERT A. SHAPIRA, M.D., *Assistant in Anatomy.*  
FRANK H. ROSE, A.B., *Teaching Fellow in Histology and Embryology.*  
RALPH F. SHANER, PH.B., *Teaching Fellow in Histology and Embryology.*  
ZABDIEL D. ADAMS, M.D., *Fellow in Anatomy.*
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NOEL G. MONROE, A.B., *Austin Teaching Fellow in Histology and Embryology.*

In this department instruction is given in Anatomy, Comparative Anatomy, Histology and Embryology. The department occupies the Morgan Anatomical Building, the dissecting rooms being in the wing designated B I, and the laboratories for Histology, Embryology, and Comparative Anatomy in the wing B II. There are separate rooms for fourth-year and graduate students and for various kinds of technical work. The class work is carried on by sections in unit rooms, designed to accommodate twelve or twenty-four students. There is a large library which contains complete files of the most important anatomical and morphological journals, together with many standard works of reference, and in an adjoining room there is a collection of about ten thousand pamphlets. A card catalogue and a classified bibliography give ready access to the literature.

The laboratory offers exceptional facilities for work in human and comparative anatomy and embryology.

The Embryological Collection is a unique feature of the laboratory. It comprises over nineteen hundred series of sections of carefully selected vertebrate embryos, and affords therefore opportunities for research in comparative embryology such as cannot be found elsewhere. The collection includes sixty series of sections from human embryos, several of which are of exceptional value, among them being two of the very youngest stages of man yet obtained. The collection of embryological models contains the standard series and many unique original models.

## REGULAR COURSES

*First Year.*—This course is intended to teach the normal, gross anatomy, histology, and embryology of the human body. Half of the time is devoted to work in the dissecting room, the other half to work in the histological and embryological laboratories. In the study of gross anatomy, each student makes a complete dissection of one-half of the human body, and all of the class dissect the same part at the same time. Two men will be assigned to the same subject, and will work together during the course. The study of the skeleton is carried on with the dissection, and each student will be provided with a box of bones which may be kept throughout the course. There will be daily lectures and demonstrations which are arranged to correspond as closely as possible with the work in the dissecting room. These lectures will serve not only as a guide to the regular work in the dissecting room, but will also be used to emphasize these details of human anatomy which the student cannot easily study for himself in his own dissection. Special dissections made by prosectors from the second year class, frozen sections, and various anatomical specimens and preparations will be displayed each day to illustrate and supplement that part of the subject treated in the lecture, or about to be studied in the dissecting room. Students are urged to examine these specimens carefully, and to discuss them informally with the instructors. A study room will be provided for purposes of review, and it will be equipped with various dissections and preparations. This room will be placed in charge of a committee of the class who will be expected to assume full responsibility for its proper use. Students will be quizzed each week on their work in the laboratory by the instructors in charge of their section. There will also be a certain number of written tests on Saturday mornings and one or two oral practical examinations before the final practical examination.

The part of the course dealing with microscopic anatomy is a study of cells, tissues, and organs, from the developmental standpoint. Cell structure and the fundamental tissues are considered first. This is followed by a study of chick embryos of 30 and 48 hours and pig embryos of 20 days, in which special stress is laid on the origin and growth of the different organs. During the remainder of the course the organs of the adult are studied in succession. In connection with the uterus, the human placenta and fetal membranes are considered. The month of January is devoted to the central nervous system and sense organs.

*Microscopes.*—Every student is strongly urged to purchase a microscope, which is a necessity in this and other courses in the School, and constantly useful in later years. The instructors will gladly advise students in regard to such purchases. Those not thus provided may rent microscopes at four dollars for the course.

## FIRST YEAR

*October, November, December, and January*

HOURS

Lectures. Assoc. Professors WARREN and BREMER. *Eleven lectures a week, nine hours.* 144

Demonstrations. *To sections of the class, at the pleasure of the instructors.*

Laboratory work. *Six and one-half hours, five times a week.* 520

## Second-Year Anatomy

The course in second-year anatomy begins on the first of February and lasts for nine weeks. The class will be divided into three sections, and each section will have approximately four hours per week. The work will consist chiefly of the careful study and drawing of selected frozen sections of the human body. Anatomical charts, special dissections, and preparations will be continuously displayed in the laboratory to illustrate the various structures seen in the sections. The drawings are to be handed in at frequent intervals for correction, and they will be discussed with each student. There will be also frequent informal, individual quizzes and discussions as the work progresses. The work in the laboratory is planned to be carried on in close coöperation with the clinical courses in medicine and surgery, and the students are strongly urged to compare the anatomical structures seen in the study of the frozen sections, especially of those through the body cavities, with the conditions found in the physical examination of patients in the hospital wards and clinics. This association between the anatomical laboratory and the clinical courses should be regarded as of a great practical importance. The course is also intended to serve as a topographical review of the work of the first year, and there will be a final written examination which will cover the work in both the first and second-year courses in anatomy.

## SECOND YEAR

*February and March*

Laboratory work to sections of the class, *four hours per week.* 36

## INVESTIGATION

Special accommodations are furnished in the laboratory for students who wish to pursue special or advanced work. Special facilities are offered to original investigators, who will receive such personal aid as may be necessary or advantageous.



A special course in vertebrate embryology is given during the second term; this has been accepted by the Faculty of Arts and Sciences, and is open to students of the academic departments.

*Fourth Year.* — For a description of the fourth-year courses offered in this department, see page 65.

### Physiology

WALTER B. CANNON, M.D., *George Higginson Professor of Physiology.*

PERCY G. STILES, Ph.D., *Assistant Professor of Physiology.*

CECIL K. DRINKER, M.D., *Instructor in Physiology.*

ALEXANDER FORBES, M.D., *Instructor in Physiology.*

MCKEEN CATTELL, S.B., *Teaching Fellow in Physiology.*

HENRY A. R. KREUTZMANN, M.D., *Teaching Fellow in Physiology.*

BRENTON R. LUTZ, S.B., *Teaching Fellow in Physiology.*

HAROLD F. PIERCE, A.B., *Teaching Fellow in Physiology.*

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ALFRED C. REDFIELD, S.B., *Austin Teaching Fellow in Physiology.*

*First Year.* — The instruction in Physiology is based, as far as possible, on observations made by the students in laboratory experiments. The experiments are selected to impress the student with the methods and the most important facts in the various divisions of the subject. Physiological processes not readily observed in the laboratory the student learns with an insight derived from practical experience in experimentation. The arrangement of the experiments is in general such that the student first learns of what activity an organ or tissue is capable, next how certain factors condition or modify that activity, and finally what may be the effect of the activity. The experiments have also been so arranged as to place those with more general bearing first, and those with special interest later. Thus reference to previously acquired information becomes more and more possible as the course proceeds.

The amount of time devoted to laboratory exercises is approximately one hundred and eighty hours. Each student is required to preserve a record of his experiments and observations in a laboratory note-book. These records are examined and criticised.

Observations of his own experiments by the student are supplemented by more than thirty special demonstrations. These exercises, some of which are performed by students under the direction of an assistant, are closely correlated with the other objective instruction. The function of the depressor nerve, motor localization in the cerebral cortex, the action of secretin and of enterokinase, and the effects of lymphagogues are examples of subjects which are demonstrated.

The facts observed in the laboratory and in the demonstrations are discussed in lectures and theses. The lectures, about ninety in number, are informal discussions permitting questions by the students or by the instructor. In these discussions the laboratory experiments are correlated with one another and with the body of physiological knowledge. Supplementing the lectures are the theses. A thesis in Physiology, based upon reading of the records of original investigations, is ordinarily required of each student. The Bowditch Library of Physiology and Biological Chemistry, containing about four thousand volumes and about twelve thousand reprints, is open to students for reference and reading. Wednesday mornings are largely devoted to work in the Library. Some of the theses, which are closely related to the regular instruction, are presented before the class. Among those read publicly during the past academic years were: Color-blindness, Heart-block, Physiological economy of nutrition, Natural defenses of the organism.

In order that students shall review the work repeatedly as the course proceeds, and also that the instructors may judge the efficiency of the teaching, the class is quizzed orally every week by the instructing staff. Usually at the end of each general division of the subject, as, for example, the nervous system, or the circulation, a written test is given. The examination books are returned, corrected, to the students. Five questions are asked; as examples the following are illustrative: What are the effects of stimulating the vasoconstrictor nerves of any particular organ? Cite morphological and physiological evidence for segmental arrangement of the nervous system. Discuss cortical localization.

If in the quizzes and tests many students show that certain points are not clearly understood, these points are briefly discussed again before the class. If a student reveals by his answers general failure to grasp the subject intelligently, he is personally conferred with regarding the character of his work. Such conferences are held after the first six weeks of the course, and usually result in a better understanding between the instructor and the student, and frequently in a marked improvement in the student's efforts.

Students who have had, before entering this course, a large part of the laboratory work or much laboratory experience may be permitted to coöperate with members of the staff in special investigations. Such students are excused from the preparation of theses.

*Fourth Year.* — For a description of the fourth-year courses offered in this department, see page 66.



## FIRST YEAR (Second half)

HOURS

Laboratory experiments. Professor CANNON, Asst. Professor STILES, Dr. DRINKER and Messrs. CATTELL, LUTZ, PIERCE and REDFIELD. <i>Daily.</i>	180
Quizzes (14). PROFESSOR CANNON. <i>One hour Saturdays.</i>	10
Written tests (5). <i>One hour Mondays.</i>	5
Lectures (90). Professor CANNON, Asst. Professor STILES and Drs. DRINKER and FORBES	90
Special demonstrations (30). Professor CANNON and Dr. FORBES.	15
Discussion of Theses (30).	20
Thesis. Written by each student from the original sources.	
Reading of investigations. The reading of investigations and the discussion of these at the appropriate conference.	

## INVESTIGATION

Any student, properly qualified, who desires to engage in physiological research will be welcomed into the laboratory and will be offered every facility for research which the laboratory affords.

## Comparative Physiology

WILLIAM T. PORTER, M.D., LL.D., *Professor of Comparative Physiology.*

I. *Physiological Research.* Students qualified for research will pursue their investigations under the immediate direction of the professor in charge.

II. *Comparative Physiology of Muscle.* Professor PORTER. *Three hours weekly during February and March.*

III. *Physiological Conference.* Professor PORTER. Demonstrations with informal discussions of selected problems in physiology. *Mondays and Thursdays, 5 to 6 P.M., throughout the year.*

*Fourth Year.*—For a description of the fourth-year courses offered in this department, see page 66.

## Biological Chemistry

OTTO FOLIN, Ph.D., *Hamilton Kuhn Professor of Biological Chemistry.*

WALTER R. BLOOR, Ph.D., *Assistant Professor of Biological Chemistry.*

LAWRENCE J. HENDERSON, M.D., *Assistant Professor of Biological Chemistry.*

GOODWIN LEB. FOSTER, A.B., *Assistant in Biological Chemistry.*

THEODORE F. ZUCKER, S.M., *Assistant in Biological Chemistry.*  
 EDWARD A. DOISY, A.B., *Teaching Fellow in Biological Chemistry.*  
 RICHARD D. BELL, M.D., *Research Fellow in Biological Chemistry.*  
 HENRY LYMAN, M.D., *Research Fellow in Biological Chemistry.*

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EDWARD P. PHELPS, S.M., *Austin Teaching Fellow in Biological Chemistry.*

*First Year.*—The lectures in this course consist of a brief discussion of the theories of chemical constitution and a survey of those classes of chemical substances which are to be found in animals and plants, and of the general principles and more important facts of physiological chemistry.

The laboratory practice is designed to acquaint the student with some of the more important constituents of living matter and their chemical behavior, and with some of the routine methods of biochemical investigation.

Conferences and discussions of selected topics supplement the main work of the course.

*Fourth Year.*—For a description of the fourth-year courses offered in this department, see page 67.

#### FIRST YEAR (Second half)

HOURS

Lectures. Professor FOLIN and Asst. Professor BLOOR. <i>One hour, five times a week.</i>	80
Laboratory work. Professor FOLIN, Asst. Professor BLOOR and Messrs. DOISY, FOSTER, PHELPS, and ZUCKER. <i>Two and one-half hours, five times a week.</i>	200

#### Bacteriology

HAROLD C. ERNST, M.D., *Professor of Bacteriology.*  
 S. BURT WOLBACH, M.D., *Associate Professor of Bacteriology and Pathology.*  
 CLEAVELAND FLOYD, M.D., *Instructor in Bacteriology.*  
 CALVIN G. PAGE, M.D., *Instructor in Bacteriology.*  
 ALBERT E. STEELE, M.D., *Instructor in Bacteriology.*  
 HORACE K. BOUTWELL, M.D., *Assistant in Bacteriology.*  
 JOHN W. HAMMOND, JR., M.D., *Assistant in Bacteriology.*  
 HENRY J. PERRY, M.D., *Assistant in Bacteriology.*  
 LESLIE H. SPOONER, M.D., *Assistant in Bacteriology.*

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———, *Austin Teaching Fellow in Bacteriology.*

*Second Year.* — Required bacteriology is taught by lectures and practical laboratory work. The lectures treat of the general subject and of methods of practical work. In the laboratory each student has an opportunity to become familiar with the simpler methods of manipulation and staining which are of especial clinical value, and with the more prominent of the pathogenic bacteria.

*Fourth Year.* — For a description of the fourth-year courses offered in this department, see page 67.

## SECOND YEAR

HOURS

Lectures. Professor ERNST. <i>Daily, except Saturdays, during October and November.</i>	40
Laboratory work. Professor ERNST and Drs. BOUTWELL, FLOYD, PAGE, PERRY, SPOONER, and STEELE. <i>Two to three hours daily during October and November.</i>	120

## Pathology

WILLIAM T. COUNCILMAN, M.D., LL.D., *Shattuck Professor of Pathological Anatomy.*

FRANK B. MALLORY, M.D., *Associate Professor of Pathology.*

S. BURT WOLBACH, M.D., *Associate Professor of Pathology and Bacteriology. Chairman of the Department.*

JAMES H. WRIGHT, M.D., S.D., *Assistant Professor of Pathology.*

NATHAN C. FOOT, M.D., *Instructor in Pathology.*

LEROY U. GARDNER, M.D., *Instructor in Pathology.*

ERNEST W. GOODPASTURE, M.D., *Instructor in Pathology.*

HARRY S. BERNSTEIN, M.D., *Assistant in Pathology.*

FRANCIS L. BURNETT, M.D., *Assistant in Pathology.*

ALBERT A. W. GHOREYEB, M.D., *Assistant in Pathology.*

MACIVER WOODY, M.D., *Assistant in Pathology.*

———, *Austin Teaching Fellow in Pathology.*

*Second Year.* — The course in Pathology consists of laboratory work and lectures. The basis of the laboratory work is the systematic course in pathological histology. In connection with this there are demonstrations of fresh material and museum specimens and experiments on animals bearing on the subjects studied. In this work the students are divided into small sections. The demonstrations are given to these sections and the experimental work on anaesthetized animals is carried out by the sections under the direction of Dr. WOODY, who superintends this branch of the work. The demonstrations and experimental work are given in

rooms adjoining the main laboratory which are adequately provided with apparatus. Both the demonstrations and experiments are in connection with the subjects which are being studied. Lectures are given five days in the week, the object of the lectures being rather to expand and coördinate the knowledge which the student is acquiring by his study of material than to impart new information. During the entire period of the course groups of students are sent to the various hospitals to see and assist in post-mortem examinations. Each group prepares microscopical specimens of the tissues from each autopsy they attend, and immediately afterwards meets for a conference with one of the instructors and the whole case is reviewed and discussed. At these conferences the clinical history of the case is read and as far as possible the pathological findings are correlated with the clinical features. No attempt is made to separate the subject of Pathology into general pathology and pathological anatomy, but the subject is studied as a whole. The more important organs of the body are covered, towards the end of the course with reference to their special pathology, particularly the blood, liver, spleen, kidneys, pancreas and genitalia. In teaching the student is taught methods of work, is given material, and directed, but he is taught to work independently. Tumors and other material coming from the surgical clinics are made full use of in the course.

On Saturdays conferences and recitations are substituted for the regular laboratory work.

In the forenoons of the third and fourth weeks of January, Professor TYZZER and Assistant Professor FABYAN give a course of lectures and laboratory exercises on animal parasites, particularly the protozoa and the infections produced by them.

During the afternoons of December and January two courses are given in the special pathology of neurology and surgery; the courses constitute a valuable introduction to the clinical work required in these subjects in the third year.

These courses are :—

- (a) Fifteen demonstrations and laboratory exercises on the pathology of the nervous system. (See Neurology.)
- (b) Twenty laboratory exercises in surgical pathology. (See Surgery.)

*Fourth Year.* — For a description of the fourth-year courses offered in this department, see page 67.

#### SECOND YEAR

#### HOURS

Lectures. Professor COUNCILMAN, Assoc. Professors MALLORY and WOLBACH, and Asst. Professor WRIGHT. *Daily for fourteen weeks, October, November, December, and January (first two weeks only).*

Laboratory work. Professor COUNCILMAN, Assoc. Professor WOLBACH, Drs. FOOT, GARDNER, BERNSTEIN, BURNETT, WOODY, and GHOREYER. <i>Three hours daily during the forenoons of October, November, December, and January (first two weeks only.)</i>	252
Demonstrations and laboratory work. Professor TYZZER and Asst. Professor FABYAN. <i>Two hours daily, third and fourth weeks of January.</i>	24
Demonstration of autopsy material. Asst. Professor J. H. WRIGHT. (M.G.H.) <i>One hour a week.</i>	
Neuropathology. Professor SOUTHARD. <i>Afternoons in December.</i>	45
Surgical Pathology. Professor NICHOLS. <i>Afternoons in January.</i>	36

### Legal Medicine

GEORGE B. MAGRATH, M.D., *Instructor in Legal Medicine.*

*Second Year.* — (1) Demonstrations of the pathological conditions met with in death following injuries of various sorts, and in sudden death, in the post-mortem rooms of the North District Morgue and of the Massachusetts General Hospital, during the forenoons of the first half-year, to sections assigned by the Pathological Department upon notification from Dr. MAGRATH.

(2) Instruction in the technique of medico-legal post-mortem examinations to be given coincidentally with (1).

*Fourth Year.* — Optional course; second half-year. (1) Instruction in the pathological conditions met with in death following injury, and in sudden death, by the case method, with special reference to the clinical and the medico-legal aspects in each case. Exercises based on autopsy, with discussion of the case, and held in the post-mortem rooms of the North District Morgue and of the Massachusetts General Hospital.

(2) Legal Medicine: medicine in its relation to the requirements of law. Systematic lectures (not less than twelve) dealing with matters of importance to the physician, alike as practitioner and as a witness in court.

### Comparative Pathology

ERNEST E. TYZZER, M.D., *George Fabyan Professor of Comparative Pathology.*

MARSHAL FABYAN, M.D., *Assistant Professor of Comparative Pathology.*  
J. HOWARD BROWN, S.M., *Assistant in Comparative Pathology.*

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*Fourth Year.* — For a description of the fourth-year courses offered in this department, see page 68.



## SECOND YEAR

Lectures. Professor TYZZER. (H.M.S.) <i>One hour daily, second and third weeks of January.</i>	12
Demonstrations and laboratory work. Professor TYZZER and Asst. Professor FABYAN. <i>Two hours daily, second and third weeks in January.</i>	24

## Preventive Medicine and Hygiene

MILTON J. ROSENAU, M.D., <i>Professor of Preventive Medicine and Hygiene.</i>	
J. PENTEADO BILL, M.D., <i>Instructor in Preventive Medicine and Hygiene.</i>	
FRANCIS B. GRINNELL, M.D., <i>Instructor in Preventive Medicine and Hygiene.</i>	
LEVERETT D. BRISTOL, M.D., <i>Boston Dispensary Research Fellow in Hygiene.</i>	
WOLFERT G. WEBBER, M.D., <i>Charles Follen Folsom Teaching Fellow in Hygiene.</i>	

*Second Year.*—The course in Preventive Medicine and Hygiene consists of lectures and demonstrations, laboratory work, sanitary survey, and sanitary excursions. The laboratory work includes the bacteriological and chemical analysis of water and milk, the determination of a carbolie coefficient, making a bacterial vaccine, testing fumigants, chemical and physical examination of the air, etc. Each student is required to make a sanitary survey of some city or town and make a report thereon. The sanitary excursions consist of visits to a vaccine and antitoxin laboratory, to a dairy, etc.

*Fourth Year.*—For a description of the fourth-year course offered in this department, see page 69.

## SECOND YEAR

## HOURS

Lectures and demonstrations. <i>One hour, twice a week, second half-year.</i>	32
Laboratory and Sanitary Survey. <i>Two hours, twice a week, second half-year.</i>	64

## Pharmacology

REID HUNT, M.D., <i>Professor of Pharmacology.</i>	
WORTH HALE, M.D., <i>Assistant Professor of Pharmacology.</i>	

Courses in pharmacology are given in the second and in the fourth years. In the second year the instruction is given by lectures, recitations,



demonstrations, and a laboratory course in which the students have an opportunity of learning the physical and chemical properties of the most important drugs and of performing experiments illustrating the physiological actions of a number of these. A few exercises are given in pharmacy and materia medica, the work consisting of demonstrations and practical exercises. Some attention is also given to toxicology. During the fourth year an opportunity is offered to students of doing more advanced work in experimental pharmacology.

*Fourth Year.*—For a description of the fourth-year course offered in this department, see page 70.

SECOND YEAR		HOURS
Lectures and demonstrations. Professor HUNT and Asst. Professor		
HALE.	<i>One hour, three times a week, second half-year.</i>	48
Laboratory work. <i>Two hours, twice a week, second half-year.</i>		32

### Medicine

HENRY A. CHRISTIAN, M.D., *Hersey Professor of the Theory and Practice of Physic.*

DAVID L. EDSALL, M.D., S.D., *Jackson Professor of Clinical Medicine.*

GEORGE G. SEARS, M.D., *Clinical Professor of Medicine.*

RICHARD C. CABOT, M.D., *Assistant Professor of Medicine.*

ELLIOTT P. JOSLIN, M.D., *Assistant Professor of Medicine.*

FRANCIS W. PEABODY, M.D., *Assistant Professor of Medicine.*

CHANNING FROTHINGHAM, M.D., *Instructor in Medicine.*

EDWIN A. LOCKE, M.D., *Instructor in Medicine.*

FREDERICK T. LORD, M.D., *Instructor in Medicine.*

WILLIAM H. ROBESY, JR., M.D., *Instructor in Medicine.*

WILLIAM H. SMITH, M.D., *Instructor in Medicine.*

RALPH C. LARRABEE, M.D., *Instructor in Medicine.*

FRANCIS W. PALFREY, M.D., *Instructor in Medicine.*

JOSEPH H. PRATT, M.D., *Instructor in Medicine.*

GERALD BLAKE, M.D., *Assistant in Medicine.*

HAROLD BOWDITCH, M.D., *Assistant in Medicine.*

MARTIN J. ENGLISH, M.D., *Assistant in Medicine.*

ALBERT A. HORNOR, M.D., *Assistant in Medicine.*

CHARLES H. LAWRENCE, JR., M.D., *Assistant in Medicine.*

HARRY LINENTHAL, M.D., *Assistant in Medicine.*

GEORGE R. MINOT, M.D., *Assistant in Medicine.*

JAMES P. O'HARE, M.D., *Assistant in Medicine.*

WILLIAM R. OHLER, M.D., *Assistant in Medicine.*

CHARLES L. OVERLANDER, M.D., *Assistant in Medicine.*

WILLARD S. PARKER, M.D., *Assistant in Medicine.*

WILLIAM D. SMITH, M.D., *Assistant in Medicine.*

GEORGE P. DENNY, M.D., *Alumni Assistant in Medicine.*

FRANCIS M. RACKEMANN, M.D., *Alumni Assistant in Medicine.*

JOSEPH C. AUB, M.D., *Teaching Fellow in Medicine.*

DAVID A. HALLER, M.D., *Teaching Fellow in Medicine.*

JAMES H. MEANS, M.D., *Teaching Fellow in Medicine.*

PAUL D. WHITE, M.D., *Teaching Fellow in Medicine.*

The instruction given by the Department of Medicine consists of both clinical and laboratory work. The clinical work is given by means of lectures, amphitheatre clinics, and practical work in the out-patient department and wards of the hospitals. Laboratory work is given at the Harvard Medical School in the laboratory of the Department. The laboratories are equipped for teaching routine clinical laboratory methods to the entire class, as well as for carrying on clinical or experimental medical research.

The general plan of the work will be to instruct the students during the second half of the second year in the methods of history-taking, physical examination, clinical laboratory technique, prescription writing and therapeutics, to drill the students in the third year as assistants in the out-patient departments of the hospitals, and in the fourth year to give them continued contact with patients by having them serve as clinical clerks in the hospital wards. Much of this work will be conducted in small sections, while lectures and amphitheatre clinics will be given for the class with the view of presenting to the students a more comprehensive knowledge of medicine. This instruction will be in part at the Harvard Medical School, in part at the Peter Bent Brigham Hospital, the Massachusetts General Hospital, the Boston City Hospital, and several of the special hospitals. In these hospitals an abundant and varied clinical material is available for the conduct of these various exercises.

*Second and Third Years.*—*Lectures and recitations.* Lectures and recitations on physical diagnosis, therapeutics and selected medical subjects will be given at the Medical School.

*Amphitheatre Clinics.*—Clinical lectures in which the students are called upon to take an active part will be given in the amphitheatre of the Peter Bent Brigham Hospital, the Massachusetts General Hospital, and the Boston City Hospital.

*Clinical Exercises.*—Small sections of the class will be drilled thoroughly in the hospitals in the taking of histories, methods of physical examination, and in the examination of urine, blood, sputum, and gastric

contents. The section work in physical diagnosis will be conducted in coöperation with the second year course in anatomy in which the anatomical relations of the thoracic and abdominal viscera are studied in relation to surface markings and physical signs.

*Laboratory.*—Students will be instructed and exercised in the chemical, microscopical, and bacteriological methods used in the practice of medicine. It is expected that each student by frequent opportunity will attain the necessary proficiency to enable him to utilize these methods in the diagnosis and prognosis of disease.

*Fourth Year.*—For a description of the fourth-year courses offered in this department, see page 70.

SECOND YEAR		HOURS
Lectures and recitations on physical diagnosis. Dr. ROBEY. (P.B. B.H.) <i>Twice a week for six weeks, second half-year.</i>		12
Lectures and recitations on therapeutics and prescription writing. Dr. FROTHINGHAM. (H.M.S. or P.B.B.H.) <i>Twice a week for ten weeks, second half-year.</i>		20
Clinical lectures. Professor SEARS. (B.C.H.) <i>Once a week, second half-year.</i>		16
Lectures. Professor EDSALL. (M.G.H.) <i>Once a week, second half-year.</i>		16
Exercises in sections, conducted by assistants under the general supervision of Dr. ROBEY. <i>Each student has fifty-two exercises, supplemented by demonstrations and recitations for the entire class.</i>		78
Laboratory exercises. Assistant Professor PEABODY and assistants. <i>Three times a week, second half-year. Two hour periods.</i>		96

THIRD YEAR		HOURS
Lectures on selected topics. Professor CHRISTIAN. (P.B.B.H.) <i>Twice a week, first half-year.</i>		32
Case teaching, exercises and discussion of selected topics. Asst. Professor CABOT. (H.M.S.) <i>Twice a week, second half-year.</i>		32
Lectures on applied therapeutics. Professor SEARS. (H.M.S.) <i>Once a week, second half-year.</i>		16
Amphitheatre clinics. Professor CHRISTIAN. (P.B.B.H.) <i>Once a week, throughout the year.</i>		32
Amphitheatre clinics. Professor EDSALL (M.G.H.) and Professor SEARS. (B.C.H.) <i>Once a week, throughout the year.</i>		32

Exercises in sections as student assistants in the out-patient departments at the M.G.H., B.C.H., or P.B.B.H. *Each section has forty-eight exercises of three hours each.* 144

#### FOURTH YEAR

A service of not less than two months as clinical clerk in the medical wards of the M.G.H., B.C.H., or P.B.B.H. is required of each student, except for those who take at least two months in surgery, in which case one month of medicine is required.

### Tropical Medicine

RICHARD P. STRONG, M.D., *Professor of Tropical Medicine*, will supervise the instruction in Tropical Medicine. Professors HAROLD C. ERNST, MILTON J. ROSENAU, and HENRY A. CHRISTIAN will constitute an Advisory Board.

*Fourth Year.* — For a description of the fourth-year courses offered in this department, see page 71.

### Surgery

The Department of Surgery includes surgery, clinical surgery, operative surgery, surgical pathology, surgical technique, genito-urinary surgery, Roentgenology, and the laboratory of surgical research.

HARVEY CUSHING, M.D., S.D., F.R.C.S., *Moseley Professor of Surgery*.

EDWARD H. NICHOLS, M.D., *Clinical Professor of Surgery*.

CHARLES A. PORTER, M.D., *Clinical Professor of Surgery*.

J. BAPST BLAKE, M.D., *Assistant Professor of Surgery*.

HUGH CABOT, M.D., *Assistant Professor of Genito-Urinary Surgery*.

DAVID CHEEVER, M.D., *Assistant Professor of Surgical Anatomy and Associate in Surgery*.

ROBERT B. GREENOUGH, M.D., *Assistant Professor of Surgery*.

HOWARD A. LOTHROP, M.D., *Assistant Professor of Surgery*.

CHARLES L. SCUDDER, M.D., *Assistant Professor of Surgery*.

PAUL THORNDIKE, M.D., *Assistant Professor of Genito-Urinary Surgery*.

JAMES S. STONE, M.D., *Instructor in Surgery*.

FREEMAN ALLEN, M.D., *Instructor in Anaesthesia*.

WALTER J. DODD, M.D., *Instructor in Roentgenology*.

JOHN HOMANS, M.D., *Instructor in Surgery*.

HALSEY B. LODER, M.D., *Instructor in Surgery*.

ROBERT B. OSGOOD, M.D., *Instructor in Surgery and Orthopedic Surgery*.

FRANK L. RICHARDSON, M.D., *Instructor in Anaesthesia.*  
FARRAR COBB, M.D., *Associate in Surgery.*  
FREDERIC J. COTTON, M.D., *Associate in Surgery.*  
WILLIAM E. FAULKNER, M.D., *Associate in Surgery.*  
JOSHUA C. HUBBARD, M.D., *Associate in Surgery.*  
DANIEL F. JONES, M.D., *Associate in Surgery.*  
FRED B. LUND, M.D., *Associate in Surgery.*  
JAMES D. BARNEY, M.D., *Assistant in Genito-Urinary Surgery.*  
HORACE BINNEY, M.D., *Assistant in Genito-Urinary Surgery.*  
WILLIAM J. BRICKLEY, M.D., *Assistant in Surgery.*  
PERCY BROWN, M.D., *Assistant in Roentgenology.*  
ROBERT C. COCHRANE, M.D., *Assistant in Surgery.*  
ERNEST G. CRABTREE, M.D., *Assistant in Genito-Urinary Surgery.*  
SAMUEL W. ELLSWORTH, M.D., *Assistant in Roentgenology.*  
SOMERS FRASERS, M.D., *Assistant in Surgery.*  
HARRY F. HARTWELL, M.D., *Assistant in Surgery.*  
JOHN B. HARTWELL, M.D., *Assistant in Surgery.*  
FRANCIS F. HENDERSON, M.D., *Assistant in Surgery.*  
OTTO J. HERMANN, M.D., *Assistant in Surgery.*  
GEORGE W. HOLMES, M.D., *Assistant in Roentgenology.*  
WALTER C. HOWE, M.D., *Assistant in Surgery.*  
CONRAD JACOBSON, M.D., *Assistant in Surgery.*  
RICHARD H. MILLER, M.D., *Assistant in Surgery.*  
WILLIAM C. QUINBY, M.D., *Assistant in Surgery.*  
EDWARD P. RICHARDSON, M.D., *Assistant in Surgery.*  
CHANNING C. SIMMONS, M.D., *Assistant in Surgery.*  
EDWARD B. TOWNE, M.D., *Assistant in Surgery.*  
BETH VINCENT, M.D., *Assistant in Surgery.*  
ROBERT H. VOSE, M.D., *Assistant in Surgery.*  
IRVING J. WALKER, M.D., *Assistant in Surgery.*  
MARK H. WENTWORTH, M.D., *Assistant in Surgery.*  
WYMAN WHITTEMORE, M.D., *Assistant in Surgery.*  
GILBERT HORRAX, M.D., *Alumni Assistant in Surgery.*  
WILLIAM S. McCANN, M.D., *Arthur Tracy Cabot Fellow in charge of  
the Laboratory of Surgical Research.*

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MACIVER WOODY, M.D., *Austin Teaching Fellow in Surgery.*

Instruction will be given by lectures, clinical lectures, demonstrations, and recitations, together with section teaching in the laboratories of surgical pathology and of surgical research, and in the wards and out-patient departments of the hospitals. Elective courses will be given in the laboratories of the Harvard Medical School, and in the wards and operating rooms of the hospitals.



Lectures and demonstrations in the use of the Roentgen Ray will be given in connection with all of the departments of the School when such instruction is desired by the head of the individual department. Arrangements can be made for such instruction with the Instructor in Roentgenology.

*Second Year.* — The course in surgery begins in January of the second year. The afternoons in January will be given to surgical pathology, and to surgical therapeutics on alternate days. Laboratory exercises in surgical pathology will be given three days a week, in which will be studied the healing of wounds, fractures, diseases of the bones and joints, and such aspects of pathology as are of special surgical importance. Two clinical lectures a week, illustrating the lesions studied in the laboratory of surgical pathology, will be given at the Boston City Hospital. On two days a week the class will be divided into two sections for practical exercises in surgical operative therapeutics.

The systematic course of lectures, clinical lectures, demonstrations and recitations will begin in February of the second year — one lecture, one recitation and two clinical lectures a week. In the first two weeks the lectures and clinics will be devoted to surgical therapeutics. The general principles of surgery, beginning with trauma, hemorrhage, sepsis, etc., will be taken up in successive weeks, and illustrated by clinical lectures and demonstrations, until the end of the second half of the second year. During the first nine weeks of the second half of the second year, beginning February 1, section work in surgical technique will be given. Each student will have twelve laboratory exercises of two hours each, on the application of bandages and surgical apparatus, and the preparation and use of surgical material and dressings. Additional exercises will be given in sections, in the hospitals, on the practical application of bandages and surgical appliances. This course in surgical technique is designed to prepare the student for the required two months' "dresser" service in the surgical out-patient department of the Massachusetts General Hospital or the Boston City Hospital. Satisfactory service in this capacity during the third year is a necessary requirement for the degree.

*Third Year.* — During the third year, one lecture, one recitation, and two clinical lectures a week will be given throughout the year. On Wednesday a lecture will be given at the Brigham Hospital at 12.30 P.M., for the whole class. On Tuesday at 12 M. two clinical lectures will be given, one at the Boston City Hospital and one at the Massachusetts General Hospital, either of which may be attended by the student having section work at one or the other hospital. During May twelve surgical hours, in morning and in afternoon exercises, will be devoted to genito-urinary surgery, and sections of the class will be assigned to short terms of service in the Genito-Urinary Departments.



*Fourth Year.*—Opportunity is afforded in the fourth-year elective courses for practical work in the wards and operating rooms of the hospitals, P.B.B.H., M.G.H., B.C.H., and C.H. For a description of the fourth-year courses offered by this department, see page 73.

SECOND YEAR	HOURS
Laboratory course in Surgical Pathology. Professor NICHOLS. (H.M.S.) <i>Twelve three-hour exercises during January.</i>	36
Laboratory course in Surgical Therapeutics. Professor CUSHING and Associates. (H.M.S.) <i>Eight three-hour exercises during January.</i>	24
Clinical lectures in connection with the course in Surgical Pathology. Professor NICHOLS. (B.C.H.) <i>Eight exercises during January.</i>	8
Clinical lectures in Surgical Therapeutics. Professor CUSHING. (P.B.B.H.) <i>Four exercises during January.</i>	4
Laboratory course in Surgical Therapeutics. Professor PORTER and Asst. Professor LOTHROP and assistants. <i>Eighteen two-hour exercises for each student during the second half of the second year.</i>	36
Lectures and demonstrations. Professors CUSHING, NICHOLS, and PORTER, and Associates. (H.M.S.) <i>Once a week, second half-year.</i>	16
Recitations. Asst. Professors LOTHROP and GREENOUGH. <i>Once a week, second half-year.</i>	16
Clinical lectures. Professor PORTER and Asst. Professor GREENOUGH (M.G.H.), Professor NICHOLS and Asst. Professors LOTHROP and BLAKE (B.C.H.). <i>Twice a week, second half-year.</i>	32

#### THIRD YEAR

Lectures and demonstrations. Professors CUSHING, PORTER, and NICHOLS, and Associates. <i>Once a week, first and second half-year.</i>	32
Clinical lectures. Professor CUSHING. (P.B.B.H.) <i>Once a week, first and second half-year.</i>	32
Clinical lectures given contemporaneously at the M.G.H. and B.C.H. Professor PORTER and Asst. Professor GREENOUGH (M.G.H.) or Professor NICHOLS and Asst. Professors LOTHROP and BLAKE (B.C.H.). <i>Once a week, first and second half-year.</i>	32
(During May of the third year, four morning and eight afternoon exercises will be devoted to genito-urinary surgery. Asst. Professor HUGH CABOT. (H.M.S. and M.G.H.))	

Recitations. Asst. Professors LOTHROP and GREENOUGH. (H.M.S.)	
Once a week, first half-year.	16
Case teaching. Asst. Professor BLAKE. (H.M.S.)	
Once a week, beginning February 1st.	16
Out-patient Surgical Dresser Service. Exercises in sections. Each student has forty-eight exercises of three hours each.	144

## FOURTH YEAR

A service of not less than two months as clinical clerk in the surgical wards of the M.G.H., B.C.H., or P.B.B.H., is required of each student, except for those who take at least two months in Medicine, in which case one month of surgery is required.

## Pediatrics

JOHN L. MORSE, M.D., <i>Professor of Pediatrics.</i>
EDWIN H. PLACE, M.D., <i>Assistant Professor of Pediatrics.</i>
CHARLES H. DUNN, M.D., <i>Instructor in Pediatrics.</i>
FRITZ B. TALBOT, M.D., <i>Instructor in Pediatrics.</i>
HENRY I. BOWDITCH, M.D., <i>Instructor in Pediatrics.</i>
ARTHUR A. HOWARD, M.D., <i>Instructor in Pediatrics.</i>
MAYNARD LADD, M.D., <i>Instructor in Pediatrics.</i>
PHILIP H. SYLVESTER, M.D., <i>Instructor in Pediatrics.</i>
THEODORE W. ELY, M.D., <i>Assistant in Pediatrics.</i>
RICHARD S. EUSTIS, M.D., <i>Assistant in Pediatrics.</i>
HAROLD A. GALE, M.D., <i>Assistant in Pediatrics.</i>
JOSEPH I. GROVER, M.D., <i>Assistant in Pediatrics.</i>
WILLIAM W. HOWELL, M.D., <i>Assistant in Pediatrics.</i>
ROBERT B. HUNT, M.D., <i>Assistant in Pediatrics.</i>
KARLTON G. PERCY, M.D., <i>Assistant in Pediatrics.</i>
RICHARD M. SMITH, M.D., <i>Assistant in Pediatrics.</i>
EDWIN T. WYMAN, M.D., <i>Assistant in Pediatrics.</i>
JAMES H. YOUNG, M.D., <i>Assistant in Pediatrics.</i>
LEWIS W. HILL, M.D., <i>Alumni Assistant in Pediatrics.</i>

*Third Year.*—The material for instruction is drawn from the Infants' Hospital, the Children's Hospital, the South Department of the Boston City Hospital, and from the Children's Departments of the Massachusetts General Hospital and the Boston Dispensary. Lectures and recitations are given on certain selected topics preparatory for the clinical teaching. Clinical lectures are given at the Children's Hospital and at the Infants' Hospital. Sectional teaching at the bedside and in the out-patient departments of the various hospitals is given throughout the year and comprises

a large proportion of the year's instruction. Bedside instruction and clinical lectures are given at the South Department of the Boston City Hospital, where the students are shown and examine cases of diphtheria, the acute exanthemata and any other contagious diseases which happen to be in the hospital. According as the opportunity arises, the students are instructed in the technique of intubation. By means of the very large amount of Pediatric material in the contagious wards, the general subject of Pediatrics as connected with contagious diseases is especially explained and illustrated. Exercises in case teaching are given in the latter part of the year. The students are also given instruction in lumbar puncture and in various laboratory procedures especially applicable to children. In all clinical and sectional teaching especial attention is paid to clinical therapeutics.

THIRD YEAR	HOURS
Lectures, recitations or case teaching. Professor MORSE and assistants. (H.M.S.) <i>Once a week, throughout the year.</i>	32
Clinical lectures. Professor MORSE and assistants. (Ch.H. or I.H.) <i>Once a week, throughout the year.</i>	32
Section Teaching. (Ch.H., I.H., M.G.H., B.D., and S.D.B.C.H.) <i>Throughout the year. Each student attends twenty-four exercises during the year.</i>	72

### Dermatology and Syphilology

CHARLES J. WHITE, M.D., *Edward Wigglesworth Professor of Dermatology.*

C. MORTON SMITH, M.D., *Assistant Professor of Syphilology.*

FREDERICK S. BURNS, M.D., *Instructor in Dermatology.*

HENRY D. LLOYD, M.D., *Assistant in Syphilology.*

E. LAWRENCE OLIVER, M.D., *Assistant in Dermatology.*

### DERMATOLOGY

*Third Year.*—Section work in clinical dermatology at the Massachusetts General Hospital throughout the year, each section receiving instruction for two weeks from 9 A.M. to 12 P.M. daily.

In April and May the class meets for eight hours at the Medical School, the instruction consisting of lectures covering all the common, important diseases illustrated by the epidiascope.

*Fourth Year.*—For a description of the fourth-year courses offered in this department, see page 77.

## SECOND YEAR

## HOURS

Clinical lectures. Professor WHITE. (M.G.H.) <i>Once a week, second half-year.</i>	16
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## THIRD YEAR

Lectures on the Anatomy and Therapeutics of the Skin. (Illustrated.) Professor WHITE. (H.M.S.) <i>Last eight weeks, second half-year.</i>	8
Section work. Clinical Dermatology. Drs. BURNS and OLIVER. (M.G.H.) <i>Each student attends twelve exercises.</i>	36

## SYPHILOLOGY

*Third Year.* — Lectures and clinical instruction are given at the Massachusetts General Hospital.

## THIRD YEAR

## HOURS

Lectures. Asst. Professor SMITH. (H.M.S.) <i>Every other week, first half-year.</i>	8
Clinical lectures. Asst. Professor SMITH. (M.G.H.) <i>Once a week, September 26 to November 20.</i>	8
Clinical exercises. Asst. Professor SMITH and Dr. LLOYD. (M.G.H.) <i>Each student attends twelve exercises, in sections.</i>	36

## Diseases of the Nervous System

The Department of Diseases of the Nervous System is composed of the sub-departments of Neuropathology, Neurology, and Psychiatry.

ELMER E. SOUTHARD, M.D., *Bullard Professor of Neuropathology.*

HERMAN M. ADLER, M.D., *Assistant Professor of Psychiatry.*

EDWARD W. TAYLOR, M.D., *Assistant Professor of Neurology.*

JAMES B. AYER, M.D., *Instructor in Neurology and Assistant in Neuropathology.*

HARRY C. SOLOMON, M.D., *Instructor in Neuropathology.*

ABRAHAM MYERSON, M.D., *Associate in Neuropathology.*

HAROLD I. GOSLINE, M.D., *Assistant in Neuropathology.*

LAWSON G. LOWREY, M.D., *Assistant in Neuropathology.*

ARTHUR P. NOYES, M.D., *Assistant in Psychiatry.*

ALBERT W. STEARNS, M.D., *Clinical Assistant in Psychiatry.*

GEORGE CLYMER, M.D., *Alumni Assistant in Neurology.*

DOUGLAS A. THOM, M.D., *Research Fellow in Neuropathology.*

## NEUROPATHOLOGY

*Second Year.*—The course consists of lectures, laboratory work, and demonstrations, with tests, review exercises, and quizzes as required. A brief review is given of the anatomy required for grasping the pathological physiology of the nervous system. The lectures introduce conceptions of value for the third-year courses in neurology and psychiatry and for the neurological parts of courses in internal medicine and in surgery. The laboratory work is mainly histopathological, dealing with the inflammatory reactions, the classical degenerations, and (in brief) with important entities such as general paresis of the insane and tabes dorsalis. To illustrate the simpler physiological applications of the work, special demonstrations are given to the students in groups at certain State institutions.

*Fourth Year.*—For a description of the fourth-year courses offered in this department, see page 77.

SECOND YEAR	HOURS
Lectures. Professor SOUTHARD and assistants. <i>Afternoons in December.</i>	12
Laboratory work. Professor SOUTHARD and assistants. <i>Two hours daily, afternoons in December.</i>	24
Written and practical tests. Professor SOUTHARD and assistants. <i>Afternoons in December.</i>	9
Demonstrations at State institutions, voluntary. Special.	

## NEUROLOGY

*Second Year.*—Clinical lectures are given at the Massachusetts General Hospital to the entire class, once a week throughout the second half of the year. The object of the course is to give the student a general knowledge of the principles of diagnosis and treatment of diseases of the nervous system as a preparation for later work. The general plan of instruction is (a) Review of the anatomy of the nervous system essential to diagnosis of organic diseases; lectures and demonstrations. (b) Pathological anatomy in its relation to diagnosis; demonstrations of specimens and photographs. (c) Study of cases as they present themselves at the out-patient department of the hospital and in the wards.

*Third Year.*—Clinical lectures are given during certain months of the third year at the Massachusetts General Hospital. The members of the class are also required to take practical work in the out-patient department in sections throughout the year. This work is practical in character and serves to bring the student into immediate contact with patients.

*Fourth Year.*—For a description of the fourth-year courses offered in this department, see page 78.



## SECOND YEAR

## HOURS

Clinical lectures. Asst. Professor TAYLOR. (M.G.H.) *Once a week, second half-year.* 16

## THIRD YEAR

Clinical lectures. Asst. Professor TAYLOR. (M.G.H.) *Once a week, November 20 to December 30 and during May.* 8  
 Section teaching. Each student attends twelve exercises in Neurology. 36

## PSYCHIATRY

## THIRD YEAR

During January, February, March, and April a clinical lecture will be given once a week at the Psychopathic Hospital. The different forms of mental disease will be discussed and patients exhibiting the symptoms under consideration will be presented.

During the first half-year a series of eight lectures will be given at the Harvard Medical School. This course is designed to present to the students the modern points of view in regard to insanity and the psychoneuroses and the mental diseases of adolescence.

Supplementary instruction is given to the class in small sections in the wards and out-patient department of the Psychopathic Hospital. Each student will examine and report on at least one case of insanity or mental defect.

## THIRD YEAR

## HOURS

Lectures. Asst. Professor ADLER. (H.M.S.) *Once a week, eight weeks, first half-year.* 8  
 Clinical lectures. Asst. Professor ADLER. (P.H.) *Once a week, January, February, March, and April.* 16  
 Section teaching. Each student attends twelve exercises in Psychiatry. 36

## Obstetrics and Gynaecology

WILLIAM P. GRAVES, M.D., *Professor of Gynaecology.*

FRANKLIN S. NEWELL, M.D., *Assistant Professor of Obstetrics and Gynaecology.*

MALCOLM STORER, M.D., *Instructor in Gynaecology.*

ERNEST B. YOUNG, M.D., *Instructor in Gynaecology.*

ROBERT L. DENORMANDIE, M.D., *Assistant in Obstetrics.*

ROBERT M. GREEN, M.D., *Assistant in Obstetrics and Gynaecology.*

JAMES L. HUNTINGTON, M.D., *Assistant in Obstetrics.*

FREDERICK C. IRVING, M.D., *Assistant in Obstetrics.*

FOSTER S. KELLOGG, M.D., *Assistant in Obstetrics.*

NATHANIEL R. MASON, M.D., *Assistant in Obstetrics and Gynaecology.*



FRANK A. PEMBERTON, M.D., *Assistant in Gynaecology.*

JOHN B. SWIFT, M.D., *Assistant in Obstetrics.*

JAMES R. TORBERT, M.D., *Assistant in Obstetrics.*

RICHARD G. WADSWORTH, M.D., *Assistant in Gynaecology.*

JOHN T. WILLIAMS, M.D., *Assistant in Gynaecology.*

RAYMOND S. TITUS, M.D., *Alumni Assistant in Obstetrics.*

### OBSTETRICS

*Third Year.*—Instruction is given by lectures, conferences, and clinical teaching. Students are required to take charge of at least six cases of labor, under supervision and instruction, to care for their patients during the convalescence, and to make full written reports of the cases. Many of these reports are read at the conferences and discussed by the class and the instructors.

*Fourth Year.*—For a description of the fourth-year courses offered in this department, see page 75.

#### SECOND YEAR

HOURS

Lectures. Asst. Professor NEWELL. (H.M.S.) *Once a week, second half-year.* 16

#### THIRD YEAR

Lectures and conferences on Obstetrics. Asst. Professor NEWELL and assistants. (H.M.S.) *Twice a week, first half-year. Once a week, second half-year.* 48

Practical instruction in Clinical Obstetrics. By members of the Department. *Throughout the year.*

### GYNAECOLOGY

Instruction is given by lectures in the third year and recitations, and clinical teaching in the fourth year. Clinics are held in the out-patient departments of the Free Hospital for Women and Boston Dispensary, and the student is instructed in diagnosis, and in the treatment of ambulatory cases.

#### THIRD YEAR

HOURS

Lectures. Professor GRAVES. (H.M.S.) *Every other week, first half-year.* 8

#### FOURTH YEAR

Clinical exercises. Professor GRAVES, and Drs. PEMBERTON and WADSWORTH (F.H. for W.), Dr. STORER (B.D.), and Drs. GREEN, MASON and WILLIAMS. (B.C.H.) *In sections, throughout the year. Each student attends twelve exercises.* 36

Electives. See page 75.

### Orthopedic Surgery

ROBERT W. LOVETT, [M.D., *John B. and Buckminster Brown Professor of Orthopedic Surgery.*

ELLIOTT G. BRACKETT, M.D., *Assistant Professor of Orthopedic Surgery.*

ROBERT B. OSGOOD, M.D., *Instructor in Orthopedic Surgery and Surgery.*

ROBERT SOUTTER, M.D., *Instructor in Orthopedic Surgery.*

AUGUSTUS THORNDIKE, M.D., *Instructor in Orthopedic Surgery.*

ZABDIEL B. ADAMS, M.D., *Assistant in Orthopedic Surgery.*

CARL H. BUCHOLZ, M.D., *Assistant in Orthopedic Surgery.*

HENRY J. FITZSIMMONS, M.D., *Assistant in Orthopedic Surgery.*

FRANK R. OBER, M.D., *Assistant in Orthopedic Surgery.*

Instruction is given in Orthopedic Surgery by lectures at the Harvard Medical School in the first half of the third year, and in the fourth year by clinical demonstrations at the Children's Hospital.

#### THIRD YEAR

#### HOURS

Lectures. Professor LOVETT. (H.M.S.) *Every other week, second half-year.*

#### FOURTH YEAR

Clinical Demonstrations. Professor LOVETT and Asst. Professor BRACKETT, and Drs. OSGOOD, SOUTTER and A. THORNDIKE (Ch.H.) In sections throughout the year. *Each student has twelve exercises.*

36

Electives. See page 75.

### Ophthalmology

———, *Williams Professor of Ophthalmology.*

ALEXANDER QUACKENBOSS, M.D., *Assistant Professor of Ophthalmology.*

FREDERICK H. VERHOEFF, M.D., *Assistant Professor of Ophthalmic Research.*

GEORGE S. DERBY, M.D., *Instructor in Ophthalmology.*

HENRY H. HASKELL, M.D., *Instructor in Ophthalmology.*

WILLIAM N. SOUTER, M.D., *Instructor in Ophthalmology.*

FRED M. SPALDING, M.D., *Instructor in Ophthalmology.*

CLIFFORD B. WALKER, M.D., *Assistant in Ophthalmology.*

Instruction in Ophthalmology consists of lectures at the Medical School in the third year and of clinical exercises devoted to diagnostic methods, diagnosis, and treatment at the Massachusetts Charitable Eye and Ear Infirmary in the fourth year.

	THIRD YEAR	HOURS
Lectures. (H.M.S.)	<i>Every other week, second half-year.</i>	8

	FOURTH YEAR	
Clinical exercises. Asst. Professor QUACKENBOSS and Drs. DERBY, HASKELL, and SPALDING. (E. and E.I.)	<i>In sections, every week during the year. Twelve exercises for each student.</i>	36
Electives.	See page 79.	

### Otology

———, *Walter Augustus Lecompte Professor of Otology.*

EUGENE A. CROCKETT, M.D., *Assistant Professor of Otology.*

FRANCIS P. EMERSON, M.D., *Instructor in Otology.*

CALVIN B. FAUNCE, Jr., M.D., *Instructor in Otology.*

PHILIP HAMMOND, M.D., *Instructor in Otology.*

WILLIAM F. KNOWLES, M.D., *Instructor in Otology.*

GEORGE H. POWERS, M.D., *Instructor in Otology.*

GEORGE L. TOBEY, Jr., M.D., *Instructor in Otology.*

DAVID H. WALKER, M.D., *Instructor in Otology.*

HENRY P. CAHILL, M.D., *Assistant in Otology.*

OLIVER A. LOTHROP, M.D., *Assistant in Otology.*

### Otology

Instruction is given by lectures at the Harvard Medical School in the third year and clinical instruction in the fourth year every morning for two weeks at the Massachusetts Eye and Ear Infirmary with anatomical and histological demonstrations at the Harvard Medical School.

	THIRD YEAR	HOURS
Lectures. Asst. Professor CROCKETT. (H.M.S.)	<i>Every other week, first half-year.</i>	8

	FOURTH YEAR	
Clinical exercises in sections. (E. and E.I.)	<i>Every student receives twelve exercises during the year.</i>	36
Electives.	See page 79.	

### Laryngology and Rhinology

ALGERNON COOLIDGE, M.D., *Professor of Laryngology.*

HARRIS P. MOSHER, M.D., *Assistant Professor of Laryngology.*

HARRY A. BARNES, M.D., *Instructor in Laryngology.*

JOHN H. BLODGETT, M.D., *Instructor in Laryngology.*

ROCKWELL A. COFFIN, M.D., *Instructor in Laryngology*  
 JOSEPH L. GOODALE, M.D., *Instructor in Laryngology*.  
 D. CROSBY GREENE, M.D., *Instructor in Laryngology*.  
 GEORGE H. WRIGHT, D.M.D., *Assistant in Laryngology*.

### Laryngology

Instruction consists of lectures in the third year, and in the fourth year each section is assigned for the mornings of two weeks to the clinic of the Massachusetts General Hospital. In addition to clinical instruction, frequent special exercises or demonstrations will be given.

#### THIRD YEAR

HOURS

Lectures. Professor COOLIDGE and Asst. Professor MOSHER assisted by Drs. GOODALE and WRIGHT. (H.M.S.) *Every other week, first half-year.* 8

#### FOURTH YEAR

Clinical exercises. Professor COOLIDGE, Asst. Professor MOSHER, and Drs. BARNES and GREENE (M.G.H.), BLODGETT and COFFIN (B.C.H.). *Forty-eight hours for each student.* Electives. See page 80. 48

### FOURTH-YEAR ELECTIVES

The fourth year is divided into eight periods, or "months," in which each student is required to take not less than three months in courses in which he serves as medical or surgical clinical clerk in hospital wards (Medicine 1, 2, 3, and 4; Surgery 1, 2, and 3), and one month each in Pediatrics and in Obstetrics, two months in a combined course including Gynaecology, Laryngology, Otology, Ophthalmology, Orthopedic Surgery and Surgical Anatomy, and one month in an elective, with the exception that students who, having attained a high standing in their Medical School work, desire to devote the whole or a part of their fourth year to one subject of study. To such students, on the recommendation of a Department head, permission to devote the whole or a part of the fourth year to one subject of study may be granted by vote of the Faculty Council, if a petition to this effect is presented with the choice of electives.

In Medicine, Surgery, Pediatrics and Obstetrics summer courses are provided under the administration of the Graduate School of Medicine by taking which students may be excused, with the approval of the Head of the Department concerned and of the Faculty Council, from taking the equivalent required work of the fourth year, and be granted the privilege of taking in place of such courses additional elective courses.

On Fridays throughout the year afternoon work in all courses will be replaced by class exercises.

The electives of the fourth year are given as half-courses, quarter-courses, and full courses. A half-course occupies the entire day for one month (the all-day plan) or the forenoons or the afternoons for two months (the half-day plan). Each half-course has a value of one hundred and twenty-five hours. Quarter-courses occupy half the day for one month. Two quarter-courses equal a half-course. Eight half-courses are necessary to satisfy the requirement of one thousand hours of work demanded in the fourth year.

The final choice of electives must be left at the Dean's office on or before May 21. No changes in electives will be allowed after the final assignments are made, except (1) for urgent reasons, when after the Secretary has first been consulted a petition approved in writing by the instructors concerned and presented to the Administrative Board not less than three weeks before the beginning of the first elective month involved has been granted, and (2) when a student's research work in an elective is necessarily prolonged beyond the time elected for that subject, in which case he will be allowed, with the permission of the Administrative Board, to make such changes in his electives as will enable him to finish his research work, provided the time required does not extend beyond the school year.

The Faculty reserves the right to modify the selection of the courses chosen by any student. The *order* in which a student's courses are arranged must be determined by the Secretary of the Faculty.

The nature of the examinations shall be determined by each department, subject to the approval of the Faculty. The student's credit may be based on his daily written record of work, and on a practical or written examination at the end of his course, or upon all combined. The mark assigned must be sent immediately to the Dean's office.

No student may select a fourth-year elective, covering a subject still owing in the work of the first three years, without the consent of the head of the Department in writing.

Those who desire to obtain additional elective months may take summer courses in certain required subjects which, with the approval of the Head of the Department concerned and of the Faculty Council, will free them from the necessity of taking courses in these subjects in the winter term, thus enabling them to fill the periods devoted to these subjects with electives. The taking of summer courses, however, shall not excuse the student from devoting himself to courses of the school during any part of the regular term. Summer courses of the Graduate School of Medicine which may be used to anticipate the requirements of special subjects are described on page 81.



The class will be divided into four groups, which provides for one month of elective work for each student. Students will, therefore, file at the Dean's Office *not later than May 21st*, on blanks provided for the purpose, (a) their preferences among courses in required subjects and (b) their choice of electives, with alternatives, to fill one month, mornings and afternoons.

#### FOURTH-YEAR COURSES ARRANGED UNDER DEPARTMENTS

##### ANATOMY.

[*Under this Heading are included the Courses in Anatomy, Comparative Anatomy, Embryology, and Histology.*]

*Anatomy 1. Prescribed Course.* Assistant Professor CHEEVER and Assistants. Quarter-courses, monthly throughout the year.

This is the course in anatomy which forms the part of the required Combined Course in Specialties and Surgical Anatomy. It is a course in applied and surgical anatomy designed to emphasize and explain such parts of general anatomy as are of practical importance. Less important details are studied briefly or omitted altogether, according to their deserts, but ample opportunity is given to the student who desires it to review the chief facts of general anatomy or to pay especial attention to regions in which he is interested.

Instruction is by demonstrations, dissection, the study of frozen sections, and specimens and informal quizzes. The greatest importance is attached to the verification by the student in his own dissection of the facts presented by the instructor.

*Anatomy 2. Advanced Vertebrate Embryology.* Associate Professor LEWIS. Half-course, all day, in a month to be arranged with the student.

An elementary knowledge of embryology, such as may be obtained from first-year Embryology is required. Course 5, offered by the Department of Zoölogy of Harvard College, or an equivalent course, is recommended.

This course consists chiefly of laboratory work. There are no lectures, but at appointed times the students meet for directions and for a thorough discussion of the specimens studied. The methods of making graphic and wax reconstructions will be taught, together with the ways of preparing drawings for publication. Reconstructions by both methods, and a certain number of drawings suitable for reproduction, will be required.



Special organs or groups of organs may be studied according to the special needs of the students.

The *Manual of Human Embryology*, edited by Keibel and Mall, will be used as a text-book and original publications will be consulted. At the discretion of the instructor students may have access to the extensive embryological collection and to the collection of models, many of which were made in the Harvard Laboratory.

*Anatomy 3. Advanced Histology.* Associate Professor BREMER. Half-course, all day, one month, April.

This course includes the study of the genesis and adult histology of special organs, or groups of organs, according to the needs of the individual student, and the principal methods of histological technic, used in such study.

#### PHYSIOLOGY.

*Physiology 1.* Half-courses, or quarter-courses, forenoons, afternoons, or all day, first half-year; afternoons, second half-year.

Detailed study in special subjects in physiology. Such study will include preparation of bibliographies, reading of classical papers, repetition of important experiments, and reports on work accomplished.

*Physiology 2. Investigation.*

Students properly qualified, who are willing to spend sufficient time in research, will be welcomed into the laboratory and given problems to work upon. During the conduct of their investigations they will receive the counsel and guidance of other investigators working with them.

Following are some suggestions for research which may readily be conducted in the Laboratory:—

Quantitative studies of human sensory and motor thresholds under various conditions, including the effects of stimulants and narcotics; the effects of toxins and poisons on the nervous system in experimental animals; the excitability of the "centers" of the medulla under various conditions. Studies in the physiology of the central nervous system. Studies of problems in the movements of the stomach and intestines, and in the activities of glands of internal secretions.

#### COMPARATIVE PHYSIOLOGY.

*Comparative Physiology 1.* Half-courses, forenoons, afternoons, or all day, throughout the year.

Students may elect work in any field of physiology. It is to be presumed that such students desire additional work in physiology to fit them for some special field of medicine, for example, the diseases of the nervous

system; or they may wish to pursue physiology, pathology, or some other biological science as a profession. They will be received into the research laboratories of the department, and will carry on their studies with the personal assistance of Professor PORTER. The work will consist of fundamental experiments, the study of accessory data, and the reading of selected original investigations. The course is open to qualified persons not students in the Medical School.

*Comparative Physiology 2. Physiology of the eye, ear, and upper respiratory tract.* Afternoons, except Friday and Saturday, in December and January.

#### BIOCHEMISTRY.

*Biochemistry 1.* Half-courses, forenoons, afternoons, or all day, throughout the year.

#### BACTERIOLOGY.

*Bacteriology 1.* Half-courses, forenoons or afternoons, February and March.

These electives will be of five kinds, including (a) instruction in methods of diagnosis, depending upon bacteriological procedures; (b) instruction in methods of bacteriological diagnosis in use in health board laboratories, including the examination of waters and soils; (c) instruction in methods of opsonic-index work, with practical application; (d) special studies of spirochaetes and trypanosomes (open during both the first and second half-years, but should be taken for at least two months); (e) research work in any direction for which the student may be fitted.

Longer courses may include one or the other of these, together with a limited piece of research work.

*Note.*—Under special conditions, electives begun before may be continued through April and May.

#### PATHOLOGY.

*Pathology 1.* Professor F. B. MALLORY. Half-courses or quarter-courses, all day or forenoons, throughout the year.

This course is given in the pathological laboratory of the Boston City Hospital. Every student must furnish his own microscope

The work consists of attendance at autopsies and of the study of the tissues obtained at them. In addition much time is devoted to the microscopic study of the most interesting lesions which have been collected at the laboratory during the last eighteen years. In this way the special pathology of the liver, kidneys, heart, blood vessels, lungs, and other organs is covered and the student is encouraged to correlate what he sees with the clinical experience which he has already received.

*Pathology 2.* Assistant Professor J. H. WRIGHT. Half-courses, all day, December, January, February, and March.

This course is given in the pathological laboratory of the Massachusetts General Hospital.

The work consists of (a) training in the technical methods used in pathology; (b) attendance at post-mortem examinations, and the fixation and study of tissues obtained from them; (c) study of the more unusual pathological lesions; (d) research work in any line which a student demonstrates his fitness to pursue.

Each course limited to four men, and will not be given as quarter-courses for two months.

*Pathology 3.* Half-courses, mornings or afternoons, second half-year.

This course is given in the laboratory of pathology, H.M.S., and is open to men acceptable to the head of the department who wish to take up research work in pathological anatomy or in experimental pathology. The problems will be arranged by consultation between students and the head of the department. Not more than two men will be received in any one course.

*Pathology 4.* Professor W. T. COUNCILMAN and Instructor. Half-courses, all day, February, March, April, and May.

This course will consist in the general work of the Pathological Laboratory of the Peter Bent Brigham Hospital, emphasis being placed upon the inter-relation of clinical and pathological work. Limited to two men in each course.

#### COMPARATIVE PATHOLOGY.

*Comparative Pathology 1.* Professor TYZZER, Assistant Professor FABYAN and Assistants. Half-course, afternoons, October and November. Laboratory work, lectures and conferences. Attendance is limited to ten students.

The laboratory work will consist in a study of such infectious diseases of man and the higher animals as are reproducible at will upon the smaller animals. Each disease taken up will be studied as far as possible in the living animal with reference to the cellular reactions and the antibodies of the blood, and the secretions and excretions. The tissue changes will be studied histologically, and the chief biological and pathogenic characters of the microorganisms investigated. At the same time attention will be given to changes in the character of the diseases, due to different degrees of artificially induced immunity.

*Comparative Pathology 2. Research.* Professor E. E. TYZZER. Students who have taken Course 1 or its equivalent will be admitted as research students to work upon some problem in experimental and comparative pathology for which adequate facilities can be provided. Such work may be undertaken at the convenience of the student.

*Comparative Pathology 3. Protozoölogy.* Professor E. E. TYZZER. Quarter-course, mornings, October and November.

The course in protozoölogy will include a general discussion of the morphology and life history of the more important human protozoan parasites, such as the amoebae, flagellata (trypanosomes, the parasites of kala azar and oriental sore), sporozoa (malarial parasites), and ciliata. Their relations to their definitive, and to intermediate hosts will also be discussed, together with phenomena of immunity. Methods for the cultivation of certain parasites and suitable procedures for collecting, staining, and mounting will be discussed.

*Comparative Pathology 4. Helminthology.* Professor E. E. TYZZER. Quarter-course, mornings, February.

The course in helminthology will include the differentiation and classification of species and instruction in collecting, preserving, staining, and mounting the parasites and their ova, and the cultivation of the parasites when possible. The human cestodes, trematodes, and nematodes will be considered in detail. Certain species of the acanthocephala, the pentastomida and hirudinea will also be discussed.

#### PREVENTIVE MEDICINE AND HYGIENE

*Preventive Medicine and Hygiene 1.* Quarter-course, afternoons, March only.

The students will investigate public methods in greater detail than is possible in the second-year course. The work will include field surveys epidemiological studies, public health laboratory methods, etc. In addition to the regular work, each student must make a special investigation of some public health problem.

The course is limited to ten men. Students must see the instructor in charge before enrolling in the course.

*Preventive Medicine and Hygiene 2.* Half-courses, all day, March or April.

The course is intended for those students who desire to investigate some special phase of public health work. Arrangements for this course must be made with the head of the department.

The course is limited to two men.

## PHARMACOLOGY.

*Pharmacology 1.* Half-course, all day, or quarter-courses, mornings or afternoons, in October.

The work in this course is designed for students who wish to become familiar with general chemical and physiological methods of detecting poisons, and with chemical and physiological methods of drug assay, or with methods for the detection of food adulterants.

## MEDICINE.

*Medicine 1.* Full courses, all day, throughout the year.

This work will be given at the Massachusetts General Hospital. Each course will be limited to ten students. Students will serve as clinical clerks in the wards of the hospital and will have opportunity to systematically study the patients. Work in the wards may be supplemented by work in the out-patient department. Ample facilities will be furnished for the laboratory investigation of the patients. This course will be given under the supervision of Professor EDSALL and Assistant Professor CABOT. Each student electing the course must take it for at least two consecutive months, unless he has already had a course in Medicine 2 or 3, in which case he may take one or more further months in this course.

*Medicine 2.* Full courses, all day, throughout the year.

This work will be given at the Peter Bent Brigham Hospital. Each course will be limited to eight students. Students will serve as clinical clerks in the wards of the hospital and will have opportunity to study systematically the patients. Work in the wards may be supplemented by work in the out-patient department. Ample facilities will be furnished for laboratory investigation of patients. This course will be given under the supervision of Professor CHRISTIAN, Dr. FROTHINGHAM, and Dr. PEABODY. Each student electing the course must take it for at least two consecutive months, unless he has already had a course in Medicine 1 or 3, in which case he may take one or more additional months in this course.

*Medicine 3.* Full courses, all day, throughout the year.

This work will be given at the Boston City Hospital. Each course will be limited to six students. Students will serve as clinical clerks in the wards of the hospital and have opportunity to study systematically the patients. Work in the wards may be supplemented by work in the out-patient department. Facilities will be furnished for laboratory investigation of patients.

The courses will be given under the supervision of Professor SEARS, Dr. LOCKE, and Dr. PALFREY. Each student electing the course must



take it for at least two consecutive months, unless he has already had a course in Medicine 1 or 2, in which case each student may take one or more additional months in this course.

*Medicine 4.* Half-courses, all day, throughout the year.

This course is intended for students who elect two months of surgery and one month of medicine to fulfil the requirement of three months' service as clinical clerk in hospital wards. Students will serve as clinical clerks in the wards of a hospital. Students will be assigned to the hospitals in which there are vacancies in accordance with the limitation of numbers allowed in each of the electives, Medicine 1, 2, and 3.

*Medicine 5.* Half-course, forenoons, February and March.

This work will be given at the Massachusetts General Hospital and will be limited to four students. Students are advised to complete courses in Medicine 1, 2, 3, or 4 before taking this course. The work will consist of the study of cardiac cases by means of various graphic methods, with discussion of cardiac disease in relation to information yielded by the application to individual cases of such graphic methods of study. This course will be given by Dr. J. H. PRATT.

*Medicine 6.* Quarter-course, forenoons, in April.

Course same as Medicine 5 except for shorter period.

## TROPICAL MEDICINE

Opportunity for the study of tropical diseases, tropical entomology, tropical pathology, tropical bacteriology, and clinical laboratory work, may be taken by special arrangement with Professor STRONG, who should be consulted by students desiring such courses.

## ROENTGENOLOGY

*Roentgenology 1.* Quarter-courses, mornings, throughout the year.

A complete course will be given in the application of the Roentgen Ray in diagnosis and therapeutics. Mornings from 8.30 A.M. to 12.30 P.M. at the Massachusetts General Hospital by Dr. WALTER J. DODD.

## PEDIATRICS.

*Pediatrics 1. Prescribed Course.* Half-courses, all day, throughout the year.

The work will consist of instruction in the wards and out-patient departments of the Children's Hospital, of the Infants' Hospital, of the Children's Department of the Massachusetts General Hospital, in the contagious wards of the South Department of the Boston City Hospital, at the Children's



Tubercular clinic of the Burroughs Place Dispensary, and in the children's wards and out-patient department of the Boston Dispensary. The students will be assigned to the various clinics by the Professor of Pediatrics, and the work will be under his supervision. The mornings will be spent in practical work in the various wards and out-patient departments. Four exercises on the significance of the ear in early life will be given in the wards of the Infants' Hospital. Especial instruction will be given at the Infants' Hospital in the examination and preparation of milk modifications in connection with substitute feeding, and here instruction will also be given in connection with the subject of wet nurses.

One afternoon in each week will be spent at the South Department. Here instruction in general pediatrics as connected with contagious diseases will be demonstrated, and whenever possible the technic of intubation will be shown.

Each student will have cases assigned to him on two afternoons of each week when in the early part of the afternoon instruction in physical examination will be given by the various instructors, and in the latter part of the afternoon these cases will be discussed with one of the senior members of the department.

The class will be taken to a model farm where everything practical pertaining to the milk supply for infants and young children will be taught. Practical instruction will also be given in a research milk laboratory, in the writing of prescriptions, and in the routine of laboratory work.

The examination will be an oral one, held by the Professor of Pediatrics.

*Pediatrics 2.* Half-course, all day, throughout the year.

The required course may be repeated as an elective, the only change being that practical work in the wards and out-patient departments will be substituted for the special work on the modification of milk at the Infants' Hospital and the visits to the model farm and milk laboratory. This course is really a repetition only in name, because, being almost entirely clinical, the patients seen must necessarily be different every month.

*Pediatrics 3.* Half-courses, all day, throughout the year.

Students who have taken the required course, and shown themselves competent, will be assigned to one of the hospitals under the control of the department, for special, practical work in the wards and out-patient departments for periods of one month or longer.

*Pediatrics 4.* Half-courses, all day, throughout the year.

Students who have taken the required course, and shown themselves competent to undertake original investigations, will be given the opportunity to undertake such investigations under the direction of the instructors in the department, for periods of one month or longer.

#### SURGERY.

The electives offered by the Department of Surgery consist of half-courses (occupying the whole day, for one month) and quarter-courses (either mornings or afternoons, for one month). They are so arranged that they may be themselves combined in different groups or taken in combination with quarter-courses offered by other departments. No student will be permitted to take more than four half-courses in surgery, without special permission of the head of the department.

1	2	3	4	5	6	7
All day. 1 month. P.B.B.H. Dresser. Practical Surgery. Oct. to May.	All day. 1 month. B.C.H. (a) Clinical and Labora- tory. Dr. Nichols. (b) Dresser Service. B.C.H. (c) Dresser Service. Relief Station. Oct. to May.	All day. 1 month. M.G.H. Dresser. Practical Surgery. Oct. to May.	Afternoons. 1 month. Children's Hospital. General Surgical Service. Dresser. Oct. to May.	Forenoons. 1 month. B.C.H. G. U. Sur- gery. Thorndike. Oct. to May.	Forenoons. 1 month. M.G.H. G. U. Sur- gery. H. Cabot. Oct. to May.	All day. 1 month. P.B.B.H. Neuro- logical Surgery. Oct. to May.
Half- course.	Half- course.	Half- course.	Quarter- course.	Quarter- course.	Quarter- course.	Half- course.

*Surgery 1. Clinical Clerk Service at the Brigham Hospital.* Half-courses, all day, for one month, throughout the year. Peter Bent Brigham Hospital. Dr. HARVEY CUSHING.

Students will serve as assistants to the hospital staff in the routine ward, operating room, and laboratory work of the hospital. The course is limited to six students.

*Surgery 2. Clinical Work at the Boston City Hospital.*

(a) Clinical and laboratory work, half-courses, all day, except Saturday and Sunday, for one month throughout the year. Associate Professor E. H. NICHOLS and Dr. MACIVER WOODY. Boston City Hospital and

Laboratory of Surgical Pathology. Includes work at the Boston City Hospital mornings, and laboratory work at the Harvard Medical School, afternoons. (b) Dresser's Service at the Boston City Hospital, half-courses, under the direction of Assistant Professor J. B. BLAKE, all day, for a month, throughout the year, at the Boston City Hospital, under hospital administration. (c) Dresser's Service at the Haymarket Square Relief Station, half-courses, all day, for one month, throughout the year, under the direction of Assistant Professor J. B. BLAKE, under hospital administration; limited to four students.

*Surgery 3. Clinical Clerk Service at the Massachusetts General Hospital.* Half-courses, all day, for one month, throughout the year. Massachusetts General Hospital. Dr. C. A. PORTER and Dr. C. L. SCUDDER.

Students will serve as assistants to the hospital staff in the routine ward, operating room, and laboratory work of the hospital. The course is limited to four students.

*Surgery 4. Clinical Clerk Service at the Children's Hospital.* Quarter-courses, afternoons, for one month, throughout the year. Children's Hospital. General Surgery. Dr. JAMES S. STONE.\*

Students will serve as assistants to the hospital staff in the routine ward, operating room, and laboratory work of the hospital. The course is limited to four students.

*Surgery 5. Genito-urinary Surgery.* Half-courses, all day, or quarter-courses, forenoons, for one month, throughout the year. Boston City Hospital. Dr. PAUL THORNDIKE and Dr. HORACE BINNEY.

Instruction will consist of ward work, taking of histories, the witnessing of and assisting at operations, the reporting of the progress of cases and seeing the end results. Conferences with the students will be held from time to time. Technic of cystoscopy will be demonstrated.

With consent of Dr. Thorndike a limited number of students may take this course as a half-course, all day, devoting the afternoon to the study of ward cases.

*Surgery 6. Genito-urinary Surgery.* Quarter-courses, forenoons, for one month, throughout the year. Dr. HUGH CABOT. Massachusetts General Hospital.

The student will be assigned as assistant in the clinic and will take part in the routine work, case-taking, examination of patients, diagnosis

\* This course can be taken in conjunction with *Orthopedic Surgery 2*, mornings for one month, to make a full half-course of practical dresser service at the Children's Hospital. In this way the student's whole day for a month will be spent at the Children's Hospital.

and treatment. Operations and after-care of major operative cases will be followed in the wards. Instruction will be given in cystoscopy and in laboratory methods of diagnosis.

*Surgery 7. Neurological Surgery.* Half-courses, all day, for one month, throughout the year. Peter Bent Brigham Hospital. Dr. HARVEY CUSHING.

The student will have an opportunity of following the neurological cases in the hospital wards, with opportunity for history taking, the use of the ophthalmoscope, and perimeter.

#### ORTHOPEDIC SURGERY.

*Orthopedic Surgery 1. Prescribed Course* Quarter-courses, afternoons, October, December, February, and April.

This course forms a part of the required combined course.

The exercises are clinical, and are given in the orthopedic clinics and wards of the Children's Hospital and of the Massachusetts General Hospital. The instruction is given daily each afternoon in the week, and is so arranged that opportunities are given for the examination of cases, with systematic note taking, combined with instruction successively in symptoms, diagnosis, the principles and details of treatment, with instruction in the common operations of orthopedic surgery as opportunity offers.

Each course is limited to eight men.

*Orthopedic Surgery 2.* Quarter-courses, mornings, from October to April inclusive.

This course is offered in the wards of the Children's Hospital, and in the wards and orthopedic out-patient department of the Massachusetts General Hospital, and in the course the student will serve as dresser and assistant, having an opportunity to make the regular visits, to examine and follow the course of operative and non-operative cases, to receive instruction in diagnosis and treatment, to be present at operations, and to receive instruction in the use of plaster of Paris and apparatus. The course will occupy the entire morning.

The course is limited to two men.

#### OBSTETRICS AND GYNAECOLOGY.

*Obstetrics and Gynaecology 1. Obstetrics. Prescribed Course.* Half-courses, all day, throughout the year.

This course fills one period of the regular fourth-year curriculum. It will be given at the Boston Lying-in Hospital and at the Medical School. During half of the course the student will lodge at the hospital, and devote his time chiefly to attendance on cases in the out-patient clinic.

In the course of this work he will be called on to assist at operations in the out-patient department, and will be expected, when his other duties permit, to make ward visits with the physician on duty in the house. In the other half of the course he will conduct the convalescence of the cases delivered by him during his resident service, and make daily ward visits, at which clinical instruction will be given in the general management of normal and abnormal labor, in the study of the puerperal convalescence, and in the care of the young infant. Detailed written reports of the out-patient cases attended will be required. His clinical work will be done under the supervision of the department and of the hospital staff on duty, and he will receive careful instruction in the proper methods of delivery and the care of the convalescence. An opportunity will be given each student to care of pregnancy in the Pregnancy Clinic, where instruction in pelvimetry and in diagnosis of presentation and position by external examination will be given. Case teaching on four afternoons during the week will be an important feature of the course. The student will also be given at the Medical School a course of demonstrations in operative obstetrics during the first week of each course, and each student will have an opportunity to perform the different operations on the manikin.

*Obstetrics and Gynaecology 2. Gynaecology. Prescribed Course.*

As part of the Combined Course of the fourth year each student will receive two weeks of clinical teaching in gynaecology during the forenoon of each day. Clinics are held in the out-patient departments of the Free Hospital for Women and the Boston Dispensary, and the student is instructed in diagnosis and the treatment of ambulatory cases.

*Obstetrics and Gynaecology 3. Gynaecology. Half-courses or quarter-courses, forenoons, throughout the year.*

This course will be given at the Free Hospital for Women by Professor GRAVES, assisted by Drs. PEMBERTON and WADSWORTH, and at the Boston City Hospital by Assistant Professor NEWELL, assisted by Drs. YOUNG, MASON, and GREEN. An attempt is made in this course to give the student as comprehensive a view as possible of the subject of gynaecology. Diagnosis is taught by a large number of pelvic examinations made in the out-patient department and in the hospital wards. It is designed that the student shall see the patient previous to operation, observe the operation, make daily ward visits, and then have an opportunity to examine the patient at the time of discharge from the hospital.

Operative gynaecology is taught in the operating room, where the various major and minor procedures are demonstrated. Students who show special aptitude are allowed to take some part in the clinical work of the hospital and occasionally in the operations.



Gynaecological pathology is taught by the study of gross specimens taken from the operating room and by drawing from microscopical sections. This department of the course is under the immediate instruction of Dr. PEMBERTON at the Free Hospital for Women and Professor MALLOY at the Boston City Hospital.

Each student is required to write at least two theses on gynaecological subjects.

Each course will be limited to sixteen students.

#### DERMATOLOGY AND SYPHILOLOGY.

*Dermatology 1.* Quarter-courses, forenoons, November, January, and March.

Instruction in clinical dermatology will be given at the Massachusetts General Hospital, both in the out-patient department and in the ward for skin diseases. The work consists of clinical demonstrations and discussions in which the student is required to perform his share. This lasts two and one-half hours a day and afterwards a case is assigned which the student studies and writes upon every evening with the aid of his books. Students electing Course 1 are strongly recommended to elect Course 2.

*Dermatology 2.* Quarter-course, afternoons, in January.

This course consists of microscopical work and is given on five afternoons a week at the Harvard Medical School. Students electing this course will be trained in the histological study of the commoner diseases of the skin.

*Dermatology 3.* Half-courses, all day, throughout the year.

Opportunity is offered to one man each month, throughout the year, to act as assistant house-officer to the out-patient department and skin ward of the Massachusetts General Hospital. Those electing this course will be expected to conform to the rules of the hospital.

*Syphilology.* Quarter-courses, forenoons, throughout the year.

Instruction in clinical syphilis will be given daily at the Massachusetts General Hospital.

Limited to four students per month.

#### DISEASES OF THE NERVOUS SYSTEM.

*Neuropathology 1.* Half-courses and quarter-courses, forenoons, afternoons, or all day, throughout the year, preferably the second half-year.

The case-method is followed. The report of a selected case will be worked up by the student (as if for publication), based upon the personal employment of approved neuropathological methods.



Limited to two during a given month. Consultation with the instructor in advance will secure the choice of a case in line with the student's later special work.

*Neuropathology 2.* Half-courses and quarter-courses, forenoons, afternoons, or all day, throughout the year.

Clinico-pathological methods in neurology and psychiatry and allied problems of internal medicine and surgery. Students taking this course for several months may, with the consent of the authorities, serve as clinical clerks or laboratory externes in the Psychopathic Hospital or, under special conditions, in other State institutions. Students will be permitted to attend staff conferences at the institutions where their work is carried on. They may be required to submit reports or theses concerning observations made.

The clerkships and externships are limited to two in a given month. The instructor should be consulted in advance.

*Neurology 1.* Half-courses, forenoons, October and May.

The design of these courses is to continue the work of the third year in its practical relations. The aim will be to give the student an opportunity for the independent study of cases. To this end the following methods of instruction in general will be adopted:—

(1) Daily informal conferences on neurological topics.

(2) History-taking and personal examinations of patients at the out-patient department of the Massachusetts General Hospital and at the Robert Bent Brigham Hospital.

(3) Assistance in the clinic.

(4) The preparation of reports bearing on the subjects studied and such original investigation as the time permits, together with a review of the literature bearing on special topics apart from text-books, is urgently advised.

In the final marking much account will be taken of the daily practical work of the student.

*Psychiatry 1.* Half-courses or quarter-courses, forenoons, or all day, throughout the year.

A clinical course in which, by permission of the authorities, the wards and laboratories of the Psychopathic Hospital may be used and the daily staff conferences attended. In addition to a complete representation of mental diseases, there is much material of a neurological and general medical interest, so that students are advised to take the work later rather than earlier in the year. Under certain circumstances students taking the course for several months may be appointed to internships by the hospital authorities.

## SEMINARY IN DISEASES OF THE NERVOUS SYSTEM.

A voluntary weekly conference for all fourth-year students taking electives in neuropathology, neurology, or psychiatry, and for graduate students taking allied courses, has been arranged by the heads of the departments mentioned. The exercises will be partly in the nature of reviews from recent literature, partly clinical or pathological demonstrations, and partly the presentation of theses and reports by students.

## OPHTHALMOLOGY.

*Ophthalmology 1.* Prescribed Course.

As a part of the prescribed course, each student will spend forenoons for two weeks in attendance at clinical exercises devoted to diagnostic methods, diagnosis and treatment, at the Massachusetts Charitable Eye and Ear Infirmary.

*Ophthalmology 2.* Half-courses, forenoons, February, March, April, and May.

The work will consist of personal instruction in the use of the ophthalmoscope and other instruments of precision. An opportunity will be given to work in the out-patient department of the Massachusetts Charitable Eye and Ear Infirmary and to observe and study cases in the wards. In addition there will be instruction in ophthalmic operations, with opportunity to witness their exemplification in the operative work of the hospital. Limited to four men.

*Ophthalmology 3.* Quarter-courses, forenoons, February, March, April, and May.

This course will be devoted to instruction in the use of the ophthalmoscope. Limited to four men.

## OTOLOGY.

*Otology 1.* Prescribed Course.

For two weeks of the Combined Course each student will receive clinical instruction in Otology, forenoons, at the Massachusetts Charitable Eye and Ear Infirmary.

*Otology 2.* Quarter-courses, forenoons, throughout the year.

In this course the student will serve as a volunteer assistant, attending the clinic in the out-patient department of the Massachusetts Charitable Eye and Ear Infirmary, and assisting at operations in the house.

*Otology 3.* Half-courses, all day, throughout the year.

This course will consist of the work of Otology 1 plus afternoon work as a clinical clerk in the house. In addition to opportunities for the

study of cases they will receive instruction in the anatomy, histology, and pathology of the ear.

*Otology 4.* Quarter-courses, afternoons, throughout the year.

This course on the histology and pathology will be given in the Laboratory at the Medical School.

#### LARYNGOLOGY.

*Laryngology and Rhinology 1.* Prescribed Course.

Forenoons of two weeks of the combined course are devoted to clinical instruction in laryngology and rhinology, with training in the use of instruments at the Massachusetts General Hospital or the Boston City Hospital.

*Laryngology 2.* Quarter-courses, forenoons, throughout the year. Massachusetts General Hospital.

These courses are chiefly clinical in character; but in addition to the routine work of the clinic, instruction will be given in diagnosis, treatment, and applied anatomy and pathology, as well as an opportunity to assist at operations. Each student is required to follow and report on some special selected subject.

Each course limited to two.

*Laryngology 3.* Drs. R. A. COFFIN and J. H. BLODGETT. Quarter-courses, forenoons, February, March, and April. Boston City Hospital.

These courses are clinical and include both ward and out-patient service in the Department for Diseases of the Nose, Throat, and Ear.

Each course limited to two.

#### COMBINED COURSE IN SPECIALTIES AND SURGICAL ANATOMY.

Two periods in the fourth-year course of each student will be devoted to a Combined Course, including work in gynaecology, laryngology, otology, ophthalmology, in the forenoons, and orthopedic surgery and surgical anatomy in the afternoons. Each student will be assigned for two weeks each to the following subjects, and at the following clinics, from nine to twelve.

*Gynaecology.* Free Hospital for Women, October, November, December, April, and May; Boston Dispensary, January, February, and March.

*Laryngology.* Massachusetts General Hospital, first half-year; Boston City Hospital, second half-year.

*Ophthalmology and Otology.* Massachusetts Charitable Eye and Ear Infirmary, throughout the year.

Details of the work in these sections are described among courses of the respective departments. Special exercises will be arranged from twelve to one, according to the schedule which will be announced to each section.

In the afternoons, students will be assigned for four weeks each to the Orthopedic Clinics at the Children's Hospital, or the Massachusetts General Hospital, and to a course in surgical anatomy, as described in Orthopedic Surgery 1 and Anatomy 1.

#### COURSES IN THE GRADUATE SCHOOL OF MEDICINE.

Courses of Graduate School of Medicine which may be taken to anticipate requirements in special subjects. For details see Catalogue of the Graduate School.

Medicine, 226, 227.

Surgery, Special.

Pediatrics, 297, 298, 299, 300.

Obstetrics, 451a with 454.

To be arranged with the Secretary of the Graduate School.

# TABULAR VIEW OF UNDERGRADUATE COURSES

## FIRST YEAR — First Half-Year

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
9-10			<i>October and November.</i> Anatomy. Lecture or Demonstrations.  <i>December and January.</i> Histology and Embryology. Lecture.			<i>October to January.</i> Lecture.
10-1			<i>October and November.</i> Anatomy. Dissection.  <i>December and January.</i> Histology and Embryology. Laboratory.			<i>October to January.</i> Examinations or Laboratory.
2-3			<i>October and November.</i> Histology and Embryology. Lecture.  <i>December and January.</i> Anatomy. Lecture or Demonstrations.			
3-5.30			<i>October and November.</i> Histology and Embryology. Laboratory.  <i>December and January.</i> Anatomy. Dissection.			

## FIRST YEAR. — Second Half-Year

PHYSIOLOGY. *February*

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
9-10				Lecture or Demonstration.		
10-1				Laboratory Experiments.		
				<i>March, April, May.</i>		
9-10				Lecture or Demonstration.		
10-12.15				Laboratory Experiments.		
12.15 -1				Thesis or Lecture or Laboratory Experiments.		
				BIOLOGICAL CHEMISTRY.		
2-3				Lecture. Daily except Saturday.		
3-5.30		Laboratory.		Laboratory and Conference.	Laboratory.	



## SECOND YEAR. — First Half-Year.

	OCTOBER.	NOVEMBER.	DECEMBER.		JANUARY.
9-12	Pathology. Laboratory.			9-10	Monday, Wednesday, and Friday. Surgery. Clinical Lecture. Nichols. B. C. H.
				9-12	Tuesday, Thursday, and Saturday. Pathology. Laboratory.
				12-1	Pathology. Lectures. First two weeks.
				9-12	Tuesday, Thursday, and Saturday. Laboratory. Dr. Tyzzer.
12-1	Pathology. Lectures. Daily.			12-1	Lectures. Dr. Tyzzer. Second and third weeks.
2-3	Bacteriology. Lectures. Daily except Saturday.	Neuropathology. Daily except Saturday. Lectures and Laboratory. Southard.			Surgical Pathology. Nichols. Surgery. Cushing and assistants.
3-5.30	Bacteriology. Laboratory. Daily except Saturday.				

## SECOND YEAR. — Second Half-Year.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
9-10	Medicine † M. G. H. Edsall	Neurology M. G. H. Taylor	Surgery B. C. H.	Dermatology M. G. H. White	Surgery M. G. H.	Medicine † B. C. H. Sears
10-12	Section Work Anatomy, Medicine, Surgery See Section Schedules					
1-2	Pharmacology Hunt Bldg. E	Clinical Pathology Peabody Bldg. D	Pharmacology Hunt Bldg. E	Clinical Pathology Peabody Bldg. D	Clinical Pathology Peabody Bldg. D	
2-3	Hygiene Rosenau Bldg. E		Hygiene Rosenau Bldg. E			
3-4	Pharmacology * Hunt Bldg. E	Medicine Frothingham † Bldg. A, Room 201	Pharmacology * Hunt Bldg. E	Obstetrics Newell Bldg. D	Medicine Frothingham † Bldg. A, Room 201	
4-5	Hygiene * Rosenau Bldg. E	Surgery Bldg. A, Room 201	Hygiene * Rosenau Bldg. E	Surgery. Bldg. D	Pharmacology Hunt Bldg. E	

\* Half the class.

† Robey first six weeks.

† Robey first six weeks, P.B.B.H.

## THIRD YEAR. — First Half-Year.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
9-12	Section Work. See Section Schedules					
12-1 or 12.30- 1.30	Medicine P. B. B. H. Christian	Surgery M. G. H. and B. C. H.	Surgery P. B. B. H.	Medicine M. G. H., Edsall and B. C. H., Sears	Pediatrics Children's and Infants' Hospital Morse	Syphilis <i>Sept. 26 to Nov. 20</i> M. G. H. Smith. Neurology <i>Nov. 20 to Dec. 30</i> M. G. H. <i>Jan.</i> Psychopathic
or 1.30 -2.30	Luncheon Period					
2.30- 3.30	Obstetrics Newell Bldg. A, Room 201	Medicine Christian Bldg. A, Room 201	Otology <i>Oct. and Nov.</i> Syphilis <i>Dec. and Jan.</i> Bldg. A, Room 201	Obstetrics Newell Bldg. A, Room 201	Medicine Christian Bldg. A, Room 201	
3.30- 4.30	Surgery Bldg. A, Room 201	Psychiatry and Laryngology alternate weeks Bldg. A, Room 201	Pediatrics Bldg. A, Room 201	Surgery Bldg. A, Room 201	Clinico-pathological Demonstration Bldg. D	
4.30- 5.30						

THIRD YEAR. — Second Half-Year.

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
9-12	Section Work. See Section Schedules					
12-1 or 12.30- 1.30	Medicine P. B. B. H. Christian	Surgery M. G. H. and B. C. H.	Surgery P. B. B. H.	Medicine B. C. H., Sears and M. G. H., Edsall	Pediatrics Children's and Infants' Hospital Nurse	Neurology and Psychiatry <i>Feb., Mar., Apr., May</i> Psychopathic M. G. H.
1 or 1.30 to 2.30	Luncheon Period					
2.30- 3.30	Obstetrics P. B. B. H. Room 201	Medicine Cabot Bldg. D, Room 221	Obstetrics <i>February, March</i> Medicine-Sears <i>April, May</i> Bldg. A, Room 201	Medicine Cabot Bldg. A, Room 201	Surgery Bldg. D Room 221	
3.30- 4.30	Surgery Bldg. A, Room 201	Pediatrics Bldg. A, Room 221	Orthopedic Surgery and Gynaecology alternate weeks Bldg. A, Room 201	Dermatology and Ophthalmology alternate weeks Bldg. A, Room 201	Clinico-Pathological Demonstration Bldg. B Room 221	
4.30- 5.30						

## CLINICAL ADVANTAGES

The Medical Department of the University is established in Boston, in order to secure for Anatomy, Pathology, and the various clinical subjects, those advantages which are found only in large cities. The following clinics and hospitals of Boston are utilized extensively for clinical exercises for medical students, who are admitted freely to the out-patient departments, wards and operating rooms of these hospitals:—

*The Peter Bent Brigham Hospital.*—This general hospital has been in active operation since February, 1913. The hospital is for general medical and surgical cases, and is situated on ground adjacent to the Medical School buildings. There are in all two hundred beds, and there is a medical and surgical out-patient department which is open for patients throughout the twenty-four hours. Dr. HENRY A. CHRISTIAN, Hersey Professor of the Theory and Practice of Physic, and Dr. HARVEY CUSHING, Moseley Professor of Surgery, in the Harvard Medical School, have been appointed by the trustees of the Hospital Physician-in-chief and Surgeon-in-chief respectively.

*The Collis P. Huntington Memorial Hospital.*—This Hospital, which has been erected by the Cancer Commission of Harvard University on the Medical School grounds, affords opportunity for the study of human tumor cases, with the advantage of a close approximation of clinical and laboratory facilities. The aim of the hospital is the study of special problems with the view of adding to the knowledge of the natural history and the rational treatment of tumors, and also to be of public service in affording means for early diagnosis and in carrying out treatment or giving advice regarding therapeutic measures. Accommodations are provided for twenty-four in-patients; out-patients are also received at stated hours.

During the year 1915-16, two hundred and sixteen new patients were cared for in the wards of the hospital and two hundred and thirty patients were seen as out-patients.

*The Massachusetts General Hospital.*—During the past year, six thousand five hundred and three patients were treated in the wards, four thousand eight hundred and fifteen patients were treated in the Accident Ward, and there were one hundred ninety thousand and six hundred and twenty-eight visits to the out-patient departments. Patients are received from all parts of the United States and the Provinces, and are visited by the students, with the attending physicians and surgeons, or demonstrated in the amphitheatres. Operations are numerous, and are performed in the surgical building. Last year there were four thousand and forty-six operations in the house and four thousand four hundred and eighty-two in the out-patient department and accident ward. Clinics in

the following special branches have been established in connection with the out-patient department : Dermatology, Laryngology, Diseases of the Nervous System, Children's Diseases, Orthopedic Surgery, Diseases of the Genito-Urinary System, and Syphilis. Two Dalton scholarships, of \$500 each, are open annually to the house pupils.

*The Boston City Hospital.*—During the past year, twenty thousand and eight hundred and ninety-three cases were treated in its wards, and there were two hundred and twelve thousand and nine visits in its various out-patient departments. The medical wards always contain many cases of acute diseases, and changes are taking place constantly. The opportunities for seeing fractures, injuries, and traumatic cases of all kinds are excellent, since, on an average, forty-two thousand street accidents are treated yearly. Surgical operations are performed in the amphitheatre. There are special services for diseases of women, of the eye, the ear, the skin, the nervous system, the nose and throat, genito-urinary system, and the bones and joints. Diseases of women and of the nervous system are also largely treated in the out-patient department. Clinical instruction is given by the physicians and surgeons two or more times a week.

In this hospital, the facilities for witnessing Operative Surgery are unsurpassed. Twice a week operations are performed in the presence of the class. The number of these operations is large, reaching over six thousand eight hundred a year. The variety is great, embracing every surgical disease and injury, including the surgical operations on the eye and ear.

*The Boston Lying-in Hospital.*—More than nine hundred patients were delivered during the last year in the Hospital. In the out-patient department, over two thousand cases were attended by the hospital Externes, who are appointed from the third and fourth-year students. Clinical instruction is given, in these cases, by the physicians to Out-Patient Department, by the house physicians, and by the Alumni Assistant.

*The Boston Dispensary.*—Over one hundred and twenty thousand visits were made by out-patients at this charity during the past year. Students have ample and excellent opportunity for seeing practical work in the diagnosis and treatment of cases illustrating the various branches of Medicine and Surgery. The opportunities in children's work are unusually good, as over one-third of the out-patients are children and there is, in addition, a well-equipped Hospital for Children, with thirty beds chiefly for medical cases.

*Infants' Hospital (Rotch Memorial Building).*—The wards of the Hospital are devoted entirely to the medical care of infants. The material of the Hospital is used throughout the year for teaching both students and graduates. Sixty-two beds.



*Children's Hospital.* — In April, 1914, the new buildings of the Hospital on Longwood Avenue, adjacent to the Harvard Medical School, were opened. During the past year more than three thousand one hundred and sixty-one cases were treated in the wards and over forty-two thousand, two hundred and twenty-one visits were made to the out-patient departments. Instruction in pediatrics, surgery, and orthopedic surgery is given by members of the hospital staff.

*The McLean Hospital.* — During the past year a daily average number of two hundred and thirteen patients, received from all parts of the country, were under treatment. Advanced methods of treatment are employed, including physical exercise, occupation, massage, hydrotherapy, etc., applied by persons expert in these methods. In the laboratories, pathological, chemical, and psychological work is carried on in immediate connection with the clinical studies and treatment of cases. There is a good special library of works in psychiatry and neurology, and a large list of American and foreign journals available for study. Clinical conferences are regularly held by the Medical Staff for the discussion of all cases admitted, including a study of the history, diagnosis, prognosis, and treatment of each case. These exercises and clinical demonstrations in the wards are available for a limited number of students.

*The Boston State Hospital.* — During the past year thirty-nine hundred and seventeen patients were under treatment. Clinical instruction is given at the Psychopathic Department, Fenwood Road, in general clinics to medical students, and there are in addition facilities for the special study of cases by students taking elective courses. Besides regular commitments, emergency, voluntary and temporary care cases are received; the whole number of patients admitted last year was thirty-one hundred and twenty-three, including many instructive examples of the various forms of mental disease.

*The Psychopathic Hospital.* — This is the receiving hospital of the Boston State Hospital, situated on Fenwood Road, two blocks removed from the Medical School grounds. The hospital was opened to patients in June, 1912. It has one hundred beds and receives patients at the rate of about two thousand a year. This large admission rate insures the presence at all times in the hospital wards of a varied clinical and pathological material. The out-patient department receives patients at the rate of over fifteen hundred a year. The State Board of Insanity has provided laboratories in the building.

*The Massachusetts Charitable Eye and Ear Infirmary.* — About seventy thousand visits are made yearly by patients in the out-patient depart-

ment and thirty-six hundred are treated in the wards, affording an opportunity to observe every variety of eye and ear diseases, together with daily operating. The services are so arranged that it is possible to easily follow the patient through his entire course of treatment both in the wards and out-patient department.

*The Free Hospital for Women.* — This hospital is devoted exclusively to the surgical treatment of the diseases peculiar to women. The hospital has a capacity of sixty-three beds. Operations are performed on Tuesdays, Wednesdays, and Thursdays throughout the morning. Physicians and medical students are invited to attend the operations and the medical ward visits with the Visiting Surgeon. Out-patient clinics are held every day in the week, beginning at nine o'clock in the morning and at three o'clock in the afternoon, excepting Saturday-afternoon. The clinics average from fifteen to thirty in attendance. Post-graduate courses in gynaecological examinations are given in these clinics. A well-equipped laboratory is connected with the institution, where instruction in gynaecological pathology is given. A library containing the principal works on gynaecology is available for the use of students and visiting physicians.

### LIBRARIES

The central library of the School is housed in Charles B. Porter Hall in the Administration Building, and in the other buildings are branch libraries. By an arrangement with the Peter Bent Brigham Hospital the library facilities of the two institutions are combined in the central library. This library is open from 9 A.M. until 10 P.M. The present number of volumes in the library is about twenty-eight thousand four hundred and sixty-nine, and in addition there are forty-nine thousand pamphlets and two hundred and sixty-nine current periodicals kept on file.

The College Library at Cambridge is open to the students of this School.

The Boston Public Library is open to students who are inhabitants of Boston. Students, not inhabitants of Boston, who have filed a bond at the Bursar's office, or deposited with the Bursar the sum of fifty dollars, may also use this library. The Bursar will furnish on application the necessary certificate of bond or deposit.

The Boston Medical Library, No. 8 The Fenway, contains about eighty-four thousand bound volumes and fifty-six thousand pamphlets, and nearly six hundred and fifty current periodicals are on file. This very valuable Library is open to those who desire to consult medical literature, on week days from 9.30 A.M. to 10 P.M., on Saturdays till 6 P.M.

### WARREN ANATOMICAL MUSEUM

The Warren Anatomical Museum was founded in 1847 by JOHN COLLINS WARREN, of the College Class of 1797, Adjunct Professor of Anatomy and Surgery from 1809 to 1815, Hersey Professor of Anatomy and Surgery from 1815 to 1847, Professor *Emeritus* from 1847 to his death in 1856, son to JOHN WARREN, the first Hersey Professor of Anatomy and Surgery. This important Museum is open to students in the School, and its collections are used in demonstration of the lectures. It occupies the upper three floors of the Administration Building. Its Curator is Dr. WILLIAM FISKE WHITNEY.

The collection has about ten thousand specimens, illustrating both normal and pathological anatomy. Students may have access to these specimens at any time upon application to the Curator.

Besides dissections and serial sections of many bones, the anatomical collection includes many corrosion preparations, plaster and papier maché models of bones, organs, and various parts of the body, and frozen sections.

The pathological collection is being constantly enlarged by the addition of numerous specimens, many of them preserved in their natural colors.

The American Ambulance of Paris has contributed a large number of specimens, from the European War, showing the effects of bullet wounds of the head and extremities, and the lesions of "gas gangrene." Also photographs of apparatus and the results of operation. The whole forms a most valuable collection, especially for a student of military surgery.

### HOSPITAL APPOINTMENTS

About eighty appointments as Internes and Assistants are made annually to hospitals in and about Boston for terms of service varying from six months to two years. These appointments are made after a competitive examination. In recent years almost every graduate of the Harvard Medical School desirous of hospital experience has obtained an appointment in some one of these hospitals.

### THE CANCER COMMISSION OF HARVARD UNIVERSITY

The Cancer Commission of Harvard University was founded in 1899, by the late Mrs. Caroline Brewer Croft, who left in her will a sum of money for the investigation of the cause and treatment of cancer. Dr. J. Collins Warren and Dr. Henry K. Oliver were the Trustees of this fund. Since that time other sums have been contributed for cancer research and the Cancer Commission of Harvard University was organized in 1909, consisting of the following members: J. Collins Warren, M.D.,

Chairman; Henry K. Oliver, M.D., and J. Collins Warren, M.D., for the Caroline Brewer Croft Fund; Henry P. Walcott, M.D., and Arthur T. Cabot, M.D., for the Corporation of Harvard College; William T. Councilman, M.D., and Theobald Smith, M.D., for the Harvard Medical School. To fill the vacancy caused by the death of Dr. Arthur T. Cabot, Dr. Edward H. Bradford was appointed in 1912; on the resignation of Dr. Theobald Smith, Dr. E. E. Tyzzer was appointed in 1916. Mr. Arthur Adams was also appointed Treasurer, and Dr. Robert B. Greenough, Secretary.

Under this Commission research on cancer problems has been carried on, and five reports of research work have been published. Investigations were carried on in the laboratories of the Harvard Medical School, and at the Massachusetts General Hospital until April, 1912, when the Collis P. Huntington Memorial Hospital (page 88) was completed. The work of the Cancer Commission is at present carried on in the laboratories of the Harvard Medical School and in the Huntington Hospital. Robert B. Greenough, M.D., Assistant Professor of Surgery, is Surgeon in charge of the Hospital, Edward H. Risley, M.D., and Channing C. Simmons, M.D., are Assistant Surgeons; Henry A. Christian, M.D., and Francis W. Peabody, M.D., are Consulting Physicians; George Adams Leland, Jr., M.D., is Surgeon to Out-Patient Department. Miss I. W. Mason is Matron and Superintendent of the Hospital.

William Duane, Ph.D., Assistant Professor of Physics, is Research Fellow of the Cancer Commission in charge of the research work on radium and radioactive substances, and their preparation for therapeutic use. William T. Bovie, M.D., is Research Fellow in Physics; Clarence C. Little, S.D., in Genetics, Henry Lyman, M.D., in Chemistry and Albert A. Ghoreyb in Pathology.

### HARVARD INFANTILE PARALYSIS COMMISSION

A Commission for the purpose of assisting in the early recognition, treatment, and study of infantile paralysis was appointed by the Corporation September 25, 1916. The Commission consists of Dr. Robert W. Lovett (Chairman), Professor of Orthopedic Surgery, Dr. Milton J. Rosenau, Professor of Preventive Medicine and Hygiene, Dr. Francis W. Peabody, Assistant Professor of Medicine, and Roger Pierce (Secretary).

Shortly thereafter, the members of the Harvard Infantile Paralysis Commission were appointed agents of the State Department of Health, thereby assuring coöperation between the Commission and the Commonwealth. This action widely increased the purposes and also the responsibilities of the Commission, in that it at once took cognizance of the

disease and its after-effects throughout the state. The work of the Commission is being prosecuted along three lines, Dr. Peabody directs the early diagnosis and treatment of acute cases; Dr. Lovett directs the problem of after-care of the paralytics; and under the supervision of Dr. Rosenau, studies are being made of the cause, mode of transmission, period of incubation and other unsolved problems relating to the disease.

The work of the Commission is being carried on in conjunction with various clinics in different parts of the state. A clinic for the care of paralytics is established at the Children's Hospital, and cooperation has been effected with other hospitals and also with other agencies. Dr. E. E. Tyzzer, Professor of Comparative Pathology, is making a study of paralysis in lower animals, and Dr. E. E. Southard, Professor of Neuropathology and Director of the Psychopathic Hospital, is helping the Commission.

The Commission is supported mainly by public subscription, and in part by an allotment of \$5000 made by the Governor of the Commonwealth from the Contingent Fund for the purpose of after-care.

### GRADUATE SCHOOL OF MEDICINE

On October 1, 1912, graduate instruction in medicine was organized as a Department of the Faculty of Medicine of Harvard University, with a separate Dean and Administrative Board.

The object is, by better organization and the development of teaching facilities,—both clinical and laboratory,—to offer graduates in medicine opportunities to continue their studies in as thorough and scientific a manner as in the Medical School proper.

Adequate opportunities for study will be offered for those graduates who wish to review past studies and for those who wish to keep abreast of recent advances in medicine. Other courses will be offered for those who are interested in special subjects, and the excellent opportunities for advanced study and for research in all departments of medical science will be made available for those who are qualified by previous training to undertake such work. Thus graduates in medicine, both of remote and of recent date, whether desiring fundamental reviews or in quest of the attainment of higher standards, are provided for. Graduates of recognized medical schools will be accepted as students.

While all courses are intended primarily for those who hold degrees from recognized medical schools, certain courses in the scientific subjects are adapted to the needs of advanced students and teachers of science. Such persons may be admitted to courses on the approval of the Administrative Board.



By special arrangement applicants in the following groups are accepted as "special class" students and receive a reduction in fees, particulars of which may be had on request:

Teachers in Medicine or Science in approved schools.

Those holding scholarships or fellowships from Harvard, from other acceptable institutions, or from governments.

Medical officers in the Army, Navy, or Public Health Service of the United States.

Missionaries.

Such other persons as the Administrative Board shall accept, on the basis that instruction is sought for the purpose of teaching or public service.

Undergraduate students of medicine may be admitted by vote of the Administrative Board to such courses as they are qualified to take. Special consideration for the needs of such students will be given in the plans for summer courses.

The laboratory facilities in the buildings of the Harvard Medical School and at some of the hospitals are available for graduate instruction, as are also abundant clinical opportunities of all kinds in the following institutions:—

Massachusetts General Hospital,	Children's Hospital,
Boston City Hospital,	Infants' Hospital (Roth Memorial Building),
Peter Bent Brigham Hospital,	Massachusetts Babies' Hospital,
Carney Hospital,	McLean Hospital,
Boston Dispensary,	Boston State Hospital,
Massachusetts Eye and Ear Infirmary,	Danvers State Hospital.
Boston Lying-in Hospital,	
Free Hospital for Women,	

Clinical and laboratory instruction will be conducted in small classes so that students may receive personal attention.

The fees for separate courses vary from \$5 to \$125, according to the nature of the instruction and the duration of the course. An extra fee is required for the use of material in laboratory, dissecting, and operative courses.

Graduates seeking admission to any of the graduate courses must first register their names at the office of the Dean of the Graduate School of Medicine, where all fees are payable, and obtain a receipt to be shown at the first exercise.

For further information and full description of the courses and lectures for graduates, address the Dean of the Graduate School of Medicine, Harvard Medical School, Longwood Avenue, Boston, Mass.



## FELLOWSHIPS AND SCHOLARSHIPS

## FELLOWSHIPS

**BULLARD FELLOWSHIPS.** In 1891, WILLIAM STORY BULLARD, of Boston, gave the sum of fifteen thousand dollars for the establishment of three fellowships of five thousand dollars each "in memory of three physicians who were distinguished for their honorable personal character and for their professional services in this community." Accordingly the three following fellowships were established:—

THE GEORGE CHEYNE SHATTUCK MEMORIAL FELLOWSHIP.

THE JOHN WARE MEMORIAL FELLOWSHIP.

THE CHARLES ELIOT WARE MEMORIAL FELLOWSHIP.

The income of the first two is two hundred and fifty dollars each, and of the last, two hundred and seventy-five dollars.

The income from any one or all of these fellowships may be paid to any student or member of the medical profession who shall be selected by the Administrative Board of the Medical School to make such original investigations in Medical Science as in their opinion will be most useful to the profession and to the community. The results of such investigations shall not, however, be published as a research performed under the grant of a Bullard Fellowship, unless the work shall have received the approval of the Committee. If published with the approval of the Committee, mention shall be made of the fact that the work was done under a Bullard Fellowship.

Holders of Bullard Fellowships are required to do an amount of work equivalent to not less than ten hours a week throughout the academic year and to present to the Committee at the end of the academic year a report on the amount and result of the work performed.

Applications for the Bullard Fellowships must be handed to the Dean on or before May 1.

**THE JAMES JACKSON CABOT FELLOWSHIP;** with an income of three hundred and fifty dollars. In 1906, Arthur T. Cabot, Samuel Cabot, and Guy C. Cabot gave six thousand dollars to establish the James Jackson Cabot Fund in the Medical School. In 1912 Guy C. Cabot added four thousand dollars to this fund. The income remaining after adding a certain percentage to the principal each year is preferably, but not necessarily, to be used for a fellowship "to aid and encourage practical work in scientific medicine."

**CHARLES FOLLEN FOLSOM TEACHING FELLOWSHIP.** In 1908 eleven thousand eight hundred and forty-three dollars and sixty-four cents was given by more than sixty persons in memory of Charles Follen Folsom,

A.B. 1862, M.D. 1870, Lecturer on Hygiene, 1877-79, on Hygiene and Mental Diseases, 1879-80, on Mental Diseases, 1880-82; Assistant Professor of Mental Diseases, 1882-85, and Overseer, 1891-1903. It was the desire of the givers that there be established in the Medical School a Charles Follen Folsom Teaching Fellowship in Hygiene or in Mental and Nervous Diseases, and that the incumbent receive the annual income of the fund, or such part of it as may be consistent with the standing rules of the Corporation in such cases. This fellowship, with an income of six hundred dollars, has been assigned to the Department of Hygiene until the further order of the President and Fellows.

HENRY P. WALCOTT FELLOWSHIP IN CLINICAL MEDICINE; with a stipend of one thousand two hundred dollars. Founded in 1910 by FREDERICK CHEEVER SHATTUCK, A.M., M.D., LL.D. "The income to provide for the support of a Fellow in Clinical Medicine, who shall receive his appointment from the Corporation on nomination by the Jackson Professor of Clinical Medicine, who, while the holder of the Fellowship, shall not engage in private practice but devote his time to teaching and clinical research work."

WILLIAM O. MOSELEY, JR., TRAVELLING FELLOWSHIPS; two, with a stipend of one thousand nine hundred and seventy-five dollars each, for the purpose of studying medicine in Europe. In January, 1912, Mrs. William O. Moseley left a bequest of seventy-four thousand dollars to establish two travelling Fellowships, to be granted annually to two men who have attended the Harvard Medical School for three or four years, and who have given evidence of their diligence and ability, the election of such men to be made by the President and proper officers connected with the Medical School. Applications for these Fellowships must be handed to the Dean on or before May 1st.

ARTHUR TRACY CABOT FELLOWSHIP. In 1913, Dr. and Mrs. Frederick C. Shattuck gave twenty-five thousand dollars for the establishment of a Fellowship in Surgery in memory of Arthur Tracy Cabot, M.D., of the Class of 1872, Fellow of the Corporation. The holder of the Fellowship is not ordinarily to engage in active private practice while holding it but to devote himself to the advancement of Surgery whether in the United States or elsewhere. The nomination to this Fellowship is by preference to be in the hands of the Moseley Professor of Surgery.

AUSTIN FELLOWSHIPS. Six teaching fellowships, of five hundred dollars each, have been established from the income of the Austin Fund and assigned to the Medical School.

HERBERT L. BURRELL FUND. The income of this fund, amounting to two hundred and sixty dollars annually, is to be devoted to the further-

ance, directly or indirectly, of the art and science of surgery. The special disposition of the income of this fund is subject to recommendations of the Dean of the Harvard Medical School.

**PROCTOR FUND.** A bequest of fifty thousand dollars by Ellen Osborne Proctor for the purpose of promoting the study of chronic diseases. The income of this fund is to be devoted to the care in hospital of persons afflicted with chronic disease, and to investigations into the nature and treatment of the same. The special disposition of the income of this fund is under the control of the heads of the departments of Theory and Practice of Physic, Clinical Medicine, and Pathology.

**WILLIAM H. THORNDIKE FUND.** The income of this fund, amounting to two hundred and sixty dollars annually, is to be devoted to the furtherance, directly or indirectly, of the art and science of surgery. The special disposition of the income of this fund is subject to recommendations of the Dean of the Harvard Medical School.

#### SCHOLARSHIPS

The Cheever Scholarship is awarded to a student of the first-year class. The Hayden Scholarship may be so awarded. All the other Scholarships are awarded to members of the three upper classes.

**EDWARD M. BARRINGER SCHOLARSHIPS.** From the estate of Edward M. Barringer, of Schenectady, N. Y., thirty thousand two hundred and thirteen dollars and forty-nine cents has been received as his residuary bequest establishing the "Edward M. Barringer fund." "And I direct that the said 'President and Fellows' forever maintain from the income of said rest and residue (if the same shall be sufficient) two scholarships for students in said Medical School, the annual amount or value of such scholarships to be fixed from time to time by the said President and Fellows in their best discretion but at not less than \$300 and \$200 respectively; and with such conditions as to them shall seem best, to be called respectively 'Edward M. Barringer Scholarship No. 1,' and 'Edward M. Barringer Scholarship No. 2.'" These scholarships, with the incomes named above, are awarded to deserving students, preferably those of the fourth class.

**LUCIUS F. BILLINGS SCHOLARSHIP,** with an income of two hundred and fifty dollars, was founded in 1900 from a bequest under the will of Lucius F. Billings. The income may be divided between two or more students.

**DAVID WILLIAMS CHEEVER SCHOLARSHIP,** with an income of two hundred and seventy-five dollars, was founded in 1889 by David Williams Cheever, M.D., LL.D., of Boston, of the Class of 1852. It is to be

awarded to a poor and meritorious student of the first year, after three months' probation in the Medical School.

**ORLANDO W. DOE SCHOLARSHIP.** The bequest of ORLANDO WITHER-  
SPON DOE (A.B. 1865, M.D. 1869) was five thousand dollars. One-half  
of the income derived therefrom, amounting to one hundred and twenty-five  
dollars, "is to be given annually as a scholarship to a deserving student  
in the Medical department."

**JOSEPH EVELETH SCHOLARSHIPS.** Three Scholarships with an annual  
income of two hundred dollars each. Founded from the residuary be-  
quest of thirty-seven thousand eight hundred and ninety-seven dollars  
and fourteen cents, made by Joseph Eveleth, of Boston, "for aiding  
deserving and indigent young men in obtaining an education in said Col-  
lege or any of the schools connected therewith." Three Scholarships on  
this foundation have been assigned to the Harvard Medical School.

**GEORGE HAVEN SCHOLARSHIPS,** with an income of eleven hundred  
dollars, were founded in 1913 from a bequest under the will of George  
Haven, the income to be used annually for scholarships to deserving  
students of the first year in the Medical School, the amount of such  
scholarships to be at the discretion of the Scholarship Committee.

The **LEWIS AND HARRIET HAYDEN SCHOLARSHIP** for colored students  
was founded in 1894 from a bequest of Mrs. Harriet Hayden. The  
income, two hundred and fifty dollars, may be divided between two or  
more students.

**HILTON SCHOLARSHIPS.** Two Scholarships, with an income of two  
hundred and twenty-five dollars each, were founded in 1897 from a bequest  
of William Hilton.

**WILLIAM OTIS JOHNSON SCHOLARSHIP,** with an income of one hundred  
and seventy-five dollars, was founded in 1912 from a bequest under the  
will of Mrs. William O. Johnson, in memory of her husband, William  
Otis Johnson, M.D., of the Class of 1845.

**CLAUDIUS M. JONES SCHOLARSHIP,** with an income of three hundred  
dollars, is from a bequest of six thousand dollars by Claudius Marcellus  
Jones, of the Class of 1866, M.D. 1875.

**ALFRED HOSMER LINDER** [SCHOLARSHIP, with an income of two  
hundred and fifty dollars, was founded in 1895 by Mrs. George Linder.  
It is to be awarded to a needy student who shall have proven himself  
to be of sound principles and marked ability.

The **JOSEPH PEARSON OLIVER SCHOLARSHIP,** with an income of four  
hundred dollars, was founded in 1904 by patients of the late Joseph



Pearson Oliver, M.D. 1871, to be awarded "to such needy and deserving student of the Medical School as the Administrative Board shall annually recommend."

CHARLES B. PORTER SCHOLARSHIP, with an income of two hundred and seventy-five dollars, was founded in 1897 from a bequest of five thousand dollars by William L. Chase.

CHARLES PRATT STRONG SCHOLARSHIP, with an income of two hundred and fifty dollars, was founded in 1894 by friends and patients of the late Charles Pratt Strong, of the Class of 1876, M.D. 1881.

ISAAC SWEETSER SCHOLARSHIP, with an income of three hundred and twenty-five dollars at present, was founded in 1892 by Mrs. Anne M. Sweetser. The income is to be "devoted to the aid of poor students of ability who would not otherwise be able to continue the studies necessary for their profession."

The JOHN THOMSON TAYLOR SCHOLARSHIP, with an income of two hundred and fifty dollars, was founded in 1899 by Mrs. Frederic D. Philips in memory of her brother, John Thomson Taylor, who died in 1889. He was a student of the Medical School from 1887 to 1889.

EDWARD WIGGLESWORTH SCHOLARSHIP, with an income of two hundred and fifty dollars, was founded in 1897 by the family of the late Edward Wigglesworth, of the Class of 1861, M.D. 1865, the yearly income of the fund to be paid to a needy and deserving student of the Medical School whom the Administrative Board shall recommend.

FRANCIS SKINNER FUND. A fund of five thousand dollars was established in 1905, the income of which shall be placed at the disposal of the Dean of the Medical School to be used by him in small sums to meet the urgent needs of meritorious students in the payment of term-bills or other expenses. Two hundred dollars is available annually.

This fund remained as an anonymous gift until 1908, when by vote of the President and Fellows of Harvard College it was named the Francis Skinner Fund in honor of the late Francis Skinner, Esq., the donor.

COTTING GIFT. The income of a fund received from the late Dr. Benjamin E. Cotting will be given to such medical student or students as the Administrative Board may select, having regard to the pecuniary needs, intellectual capacity, faithfulness and earnest endeavor, rather than to highest scholarship merely. The amount to be awarded annually will be one hundred and fifty dollars.

JOHN FOSTER FUND. The income of the John Foster Fund, amounting to about one hundred and fifty dollars, is available in alternate years in the Law School and in the Medical School, for one or more meritorious

students needing assistance. The next assignment in the Medical School will be made in 1916.

**JAMES EWING MEARS GIFT IN MEDICINE.** Dr. J. EWING MEARS has entered into an agreement with the President and Fellows whereby he has provided for the payment of \$225 a year during his lifetime for the maintenance of a scholarship in the Medical School; and the permanence of this scholarship has been secured by a bequest of \$5000. The scholarship is to be awarded to a young man whose financial resources are such that he cannot, unaided, acquire a medical education, and whose scholarship is good. This scholarship is to be held for the full course of four years in the Medical School, subject to the standing the recipient shall maintain in scholarship and to his good conduct as a student of the School.

**THE LOAN FUND OF THE MEDICAL CLASS OF 1879.** The Medical Class of 1879 has given the sum of \$436.79 to be used as a loan fund to aid any student or students in the Medical School in accordance with the request of the Class, or, in the absence of such request, under the direction of the Faculty of Medicine.

*Fellowships and Scholarships available in other Departments of the University as well as in the Medical School*

**THE FREDERICK SHELDON FUND FOR TRAVELLING FELLOWSHIPS AND SCHOLARSHIPS.** *The income of this Fund is available for holders of any degree from Harvard University. For further particulars, see University Catalogue for 1916-17.*

**THE CHARLES ELLIOTT PERKINS SCHOLARSHIP;** with an income of three hundred dollars, "to be offered each year to a graduate of an Iowa College or University, in any of the graduate or professional departments of Harvard University." The terms of gift are quoted further in the University Catalogue for 1916-17.

**THE JAMES A. RUMRILL SCHOLARSHIP;** with an income at present of two hundred and twenty-five dollars. This Scholarship, founded in 1909 by Mrs. JAMES A. RUMRILL, in memory of her husband, JAMES AUGUSTUS RUMRILL, of Springfield, Mass., of the Class of 1859, will be offered each year to a properly qualified graduate of a college or university in Virginia, North Carolina, South Carolina, Florida, Georgia, Tennessee or Kentucky. The terms of gift are quoted further in the University Catalogue for 1916-17.

**THE PRINCETON FELLOWSHIP;** with a stipend of four hundred and fifty dollars. From a graduate of Princeton University, to be awarded to



a graduate of that University studying in any department of Harvard University.

THE WILLIAM STANISLAUS MURPHY SCHOLARSHIPS; with an income of \$250 each, founded by WILLIAM STANISLAUS MURPHY, of the class of 1885, to be used for the collegiate education of men of the name of Murphy, who, in the judgment of the faculty prove deserving of this kind of encouragement. These scholarships are available for students in all departments of the University.

Applications should be made to Dean L. B. R. BRIGGS, the chairman of the Committee on General Scholarships and on the Sheldon Fund.

These scholarships and gratuities are awarded to such men among those applying for and needing assistance as give evidence of having done the best work either in this School or in a preparatory course elsewhere.

Students who have not been able to obtain scholarships often find time and opportunity to do outside work of various kinds in the city.

Information with regard to all forms of pecuniary aid may be obtained from the Director of Scholarships. The Director will aid deserving students in obtaining work. Certain loan funds not enumerated above are at his disposal. Students requiring aid should visit the Director as soon as possible to discuss with him their financial needs. The Director will also act in advisory capacity with the students in any matters not intimately associated with the curriculum.

Third-year students may apply for scholarships in January; second-year students, in February; first-year students, in March. All applications must be made before *May 1*.

Applications for the Cheever, Hayden, and Haven Scholarships must be handed to the Director of Scholarships on or before *December 10th*. These scholarships are open only to students who are members of the School at the time of application.

Blank forms, on which all applications for pecuniary aid must be made, may be obtained of the Director of Scholarships.

### BOYLSTON MEDICAL PRIZES

These prizes, which are *open to public competition*, are offered for the best dissertation on questions in medical science proposed by the Boylston Medical Committee.

Information in regard to coming prizes may be obtained from the Secretary, H. C. ERNST, M.D., Harvard Medical School, Boston, Mass.

In awarding these prizes, preference will be given to dissertations which exhibit original work, but if no dissertation is considered worthy of a prize, the award may be withheld.

Each dissertation must bear, in place of the author's name, some sentence or device, and must be accompanied by a sealed packet, bearing the same sentence or device, and containing within the author's name and residence.

*Any clew by which the authorship of a dissertation is made known to the Committee will debar such dissertation from competition.*

Dissertations must be printed or typewritten, and their pages must be bound in book form.

All unsuccessful dissertations are deposited with the Secretary, from whom they may be obtained, with the sealed packet unopened, if called for within *one year* after they have been received.

By an order adopted in 1826, the Secretary was directed to publish annually the following votes:—

1. That the Board does not consider itself as approving the doctrines contained in any of the dissertations to which premiums may be adjudged.
2. That, in case of publication of a successful dissertation, the author be considered as bound to print the above vote in connection therewith.

The Boylston Medical Committee is appointed by the President and Fellows of Harvard College, and consists of the following physicians: WILLIAM F. WHITNEY, M.D., *Chairman*; HAROLD C. ERNST, M.D., *Secretary*; WILLIAM T. PORTER, M.D., HENRY A. CHRISTIAN, M.D., EDWARD H. NICHOLS, M.D., JOHN WARREN, M.D., REID HUNT, M.D.

The address of the *Secretary* of the Boylston Medical Committee is HAROLD C. ERNST, M.D., Harvard Medical School, Boston, Mass.

*Otological Prize.*—For the best preparation illustrating the osseous anatomy of the ear or for the best thesis showing original work on an otological subject, a prize of twenty-five dollars is offered, open to fourth-year students.

*Other Prizes.*—The Bowdoin, Dante, Sumner and Toppan Prizes, offered by the Faculty of Arts and Sciences, are open to students in all departments of the University. Full particulars in regard to these prizes may be found in the University Catalogue for 1916-17.

## DEGREES

ON FEBRUARY 28, 1916, DEGREES WERE CONFERRED AS FOLLOWS:—

## M.D.

- José Penteado Bill, A.B. (*Dickinson Coll.*) 1907.  
 Robert Albert Christman, PH.B. (*Lafayette Coll.*) 1911.  
 William Edward Hunter, A.B. (*Univ. of Utah*) 1913.  
 Frank William Marvin, A.B. 1910.  
 Robert Ray Sattler, A.B. (*Univ. of Michigan*) 1911.  
 Joseph Henry Shortell.  
 Clifton Clark Taylor, A.B. (*Dartmouth Coll.*) 1912.

M.D. *cum Laude*

- Donald Munro, A.B. 1911. William Albert Perkins, A.B. 1912.

ON COMMENCEMENT DAY, JUNE 22, 1916, DEGREES WERE CONFERRED AS FOLLOWS:—

## M.D.

- Jacob Aaronson, A.B. 1912.  
 Sumner Cheever Andrews, A.B. 1910.  
 William Hulbert Barrow, A.B. 1908.  
 Diego Abraham Biascochea, S.B. (*Univ. of Michigan*) 1914.  
 Maurice Taggart Briggs, A.B. 1912.  
 Edmund John Butler, A.B. (*Boston Coll.*) 1912.  
 Claudius Virgil Calvin, S.B. (*Allegheny Coll.*) 1914.  
 Kenneth Churchill, A.B. (*Bowdoin Coll.*) 1912.  
 Edward Saunders Dillon, A.B. (*Princeton Univ.*) 1911.  
 Eldon Marshall Findley, A.B. (*Univ. of Missouri*) 1914.  
 William Meyer Findley, A.B. (*Univ. of Missouri*) 1913.  
 Neil Augustus Fogg, A.B. (*Bowdoin Coll.*) 1913.  
 John Joseph Gilbert, A.B. (*Brown Univ.*) 1912.  
 Launcelot Curry Goffin, A.B. (*Univ. of Missouri*) 1914.  
 Ross Golden, A.B. (*Cornell Coll.*) 1912.  
 Clarence Milo Grace, A.B. (*Washington State Univ.*) 1912.  
 Paul Gustafson, A.B. 1912.  
 John Homer Hamilton, S.B. (*Oklahoma Agricultural and Mechanical Coll.*) 1910.  
 Edward Harding, A.B. 1911.  
 Frank Wellington Hodgdon, Jr., A.B. 1911.  
 Earl Edward Hussey, A.B. (*St. Mary's Coll.*) 1911, A.M. (*ibid.*) 1913.  
 Clarence Henry Hyman, S.B. (*Heidelberg Univ.*) 1911.

Harold Bartlett Johnson, A.B. 1911.  
Alfred Gustav Langmann, A.B. 1912.  
Thomas Hinckley Lanman, A.B. 1912.  
Franklin Patterson Lowry, S.B. 1912.  
John Archibald McIntyre, S.B. (*Cornell Coll.*) 1912.  
William Edward Roche McMahon, A.B. (*Holy Cross Coll.*) 1910.  
Barclay Wellington Moffat, A.B. 1912.  
Samuel Leslie Morris, Jr., S.B. (*Davidson Coll.*) 1911.  
Andrew Nichols, 3d, A.B. 1912.  
Harry Archibald Nissen, A.B. (*Univ. of South Dakota*) 1911.  
Frank Thorwald Oberg, A.B. (*Clark Univ.*) 1912.  
Charles William Peabody, A.B. 1912.  
Benjamin Harrison Ragle, A.B. (*De Pauw Univ.*) 1912.  
Laurance David Redway, A.B. 1912.  
James Vincent Ricci, A.B. (*Brown Univ.*) 1913.  
Bertrand Earle Roberts, A.B. 1912.  
Joseph Carr Savage, A.B. (*Univ. of Colorado*) 1913.  
Howard Edwin Settle, A.B. 1913 (1912).  
Ivan Read Stidger, A.B. (*Allegheny Coll.*) 1911.  
George Loughlin Tully, A.B. 1912.  
Henry Rouse Viets, Jr., S.B. (*Dartmouth Coll.*) 1912.  
John Herbert Waite, S.B. (*Bucknell Univ.*) 1911.  
George Watt, S.B. (*Univ. of Michigan*) 1914.  
Stanley Burnham Weld, A.B. (*Dartmouth Coll.*) 1912.  
George Browning Wilbur, S.B. 1912.  
Paul Richmond Withington, A.B. 1912.

M.D. *cum Laude*

Hiram Hygazon Amiral, A.B. (*Univ. of Rochester*) 1911.  
Joseph Charles Aub, A.B. 1911.  
George Hoyt Bigelow, A.B. 1913 (1912).  
Alan Gregg, A.B. 1911.  
Carl Thorburn Harris, S.B. (*Univ. of Rochester*) 1912.  
David Walker Houston, Jr., A.B. (*Princeton Univ.*) 1912.  
Benoni Price Hurst, A.B. (*Amherst Coll.*) 1912.  
Walter Hamer Lacey, A.B. 1912.  
John Houghton Taylor, A.B. 1913 (1912).  
Ward Stanley Wells, S.B. (*Grinnell Coll.*) 1909.  
Harold Eugene Winchester, S.B. (*Dartmouth Coll.*) 1910.

M.D. *Magna cum Laude*

Thomas Rodman Goethals, A.B. 1912.

Hilmar Koefod, S.B. (*Beloit Coll.*) 1911.

Arthur Bates Lyon, A.B. (*Amherst Coll.*) 1912.

Frederic Parker, Jr., A.B. 1913.

David Louis Rapport, A.B. 1912.

Adrian Stevenson Taylor, M.D. (*Univ. of Virginia*) 1905.

## Dr. P.H.

Ralph Robertson Mellon, S.B. (*Grove City Coll.*) 1901, M.D. (*Univ. of Michigan*) 1909, S.M. (*ibid.*) 1913.

*Special Field*, Bacteriology.

*Thesis*, "A Study of the Diphtheroid Group of Organisms, with Special Reference to its Relation to the Streptococci."

Wilson George Smillie, A.B. (*Colorado Coll.*) 1908, M.D. (*Harvard Univ.*) 1912.

*Special Field*, Epidemiology.

*Thesis*, "Studies of the Streptococcus of Smith."

## THE MEDICAL SCHOOL

### CANDIDATES FOR THE DEGREE OF DOCTOR OF PUBLIC HEALTH

Bristol, Leverett Dale, S.B. (*Wesleyan Univ.*) 1903; M.D.  
 (*Johns Hopkins Univ.*) 1907, Boston

### FOURTH CLASS

<p>Adams, Frank Dennette, LITT.B. (<i>Princeton Univ.</i>)                      1913,                      Adams, William Bradford, A.B. 1913,                      Ashton, Leslie Orrell, S.B. (<i>Dartmouth Coll.</i>) 1913,                      Astrin, Albert, A.B. 1911,                      Baker, Horace Mitchell, S.B. (<i>Mass. Agricultural Coll.</i>)                      1912,                      Bean, Harold Cotton, S.B. (<i>Dartmouth Coll.</i>) 1914,                      Belknap, Robert Willis, A.B. (<i>Bowdoin Coll.</i>) 1913,                      Berry, Francis Brown, A.B. 1914,                      Brady, John William Stansbury, A.B. 1910,                      Brown, Frederick Ronald, A.B. (<i>McGill Univ.</i>) 1913,                      Buchanan, Edwin Porter, S.B. (<i>Princeton Univ.</i>) 1913,                      Buckman, Thomas Ellwood, A.B. 1912, A.M. 1914,                      Bugbee, Edwin Percy, S.B. (<i>Tufts Coll.</i>) 1912,                      Busby, Eldon Durward, A.B. (<i>McGill Univ.</i>) 1913,                      Callister, Alfred Cyril, A.B. (<i>Univ. of Utah</i>) 1915,                      Chaffin, George Lawrence, A.B. (<i>Univ. of Utah</i>) 1914,                      Cheney, Marshall Chipman, A.B. (<i>Univ. of California</i>)                      1909,                      Clifford, Randall, A.B. 1912,                      Cunningham, Thomas Donald, S.B. (<i>Dartmouth Coll.</i>)                      1913,                      Dallwig, Herbert Carl, S.B. (<i>Univ. of Wisconsin</i>) 1914,                      S.M. (<i>ibid.</i>) 1915,                      Dearing, Arthur Herbert, S.B. (<i>Dartmouth Coll.</i>) 1914,                      Dresel, Rudolph Ludwig, A.B. (<i>Univ. of California</i>)                      1913,                      Fellows, Albert Whittier, S.B. (<i>Dartmouth Coll.</i>) 1914,                      FitzGerald, Edmund Boyd, A.B. 1913,</p>	<p>Washington, D. C.                      Springfield                      Lawrence                      Boston                        Selbyville, Del.                      Boston                      Damariscotta, Me.                      Providence, R. I.                      Boston                      Danville, Can.                      Pittsburgh, Pa.                      Cambridge                      Methuen                      Ottawa, Can.                      Salt Lake City, Utah                      Farmington, Utah                        Berkeley, Cal.                      New Bedford                        Denver, Colo.                        Milwaukee, Wis.                      So. Portland, Me.                        San Francisco, Cal.                      Dorchester                      Wollaston</p>
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- Goldman, Ahbrum Milton, A.B. (*Univ. of Kansas*) 1914, Kansas City, Mo.
- Gould, Adrian Gordon, PH.B. (*Brown Univ.*) 1913, Youngstown, O.
- Hall, Francis Cooley, LITT.B. (*Princeton Univ.*) 1913, Brookline
- Hutchinson, Charles William, A.B. 1906, A.M. 1907, Framingham Centre
- Hutchinson, Rollo Wilson, A.B. (*Dartmouth Coll.*) 1913, Milford, N. H.
- Isaacson, Abraham Samuel, A.B. (*Brown Univ.*) 1913, Malden
- \*Jackson, George Henry, Jr., Newtonville
- Jacobson, Victor Clarence, S.B. (*Univ. of Wisconsin*) 1915, La Crosse, Wis.
- Johnston, James Scott, A.B. (*Univ. of Michigan*) 1910, Ithaca, N. Y.
- A.M. (*ibid.*) 1911, Minneapolis, Minn.
- King, William Robert, S.B. (*Univ. of Minnesota*) 1913, Minneapolis, Minn.
- Klein, Armin, A.B. 1914, Chelsea
- Lurie, Moses Hyman, D.M.D. 1913, Dorchester
- Mabon, Thomas McCance, S.B. (*Princeton Univ.*) 1913, Pittsburgh, Pa.
- McCarthy, James Matthew, Jr., A.B. (*Holy Cross Coll.*) 1913, Woonsocket, R. I.
- MacGhee, Aaron Lawson, S.B. (*Colby Coll.*) 1913, Augusta, Me.
- McIver, Monroe Anderson, A.B. (*Univ. of North Carolina*) 1912, Gulf, N. C.
- Marshall, John Ross, A.B. 1913, Brookline
- Menninger, Karl Augustus, A.B. (*Univ. of Wisconsin*) 1914, S.M. (*ibid.*) 1915, Topeka, Kan.
- Meysenbug, Ludo von, A.B. (*Washington and Lee Univ.*) 1913, New Orleans, La.
- Miller, Howard Stephen, S.B. (*Univ. of Pittsburgh*) 1912, Freedom, Pa.
- Moloney, James Bowe, A.B. 1914, So. Boston
- Neal, Kemp Prather, A.B. (*Trinity Coll., N. C.*) 1913, Monroe, N. C.
- Nisbet, Douglas Heath, S.B. (*Davidson Coll.*) 1913, Charlotte, N. C.
- Norbury, Frank Garm, A.B. (*Illinois Coll.*) 1912, A.M. (*Univ. of Illinois*) 1913, Springfield, Ill.
- \*Oerting, Harry, St. Paul, Minn.
- Parkins, Leroy Edward, A.B. (*Simpson Coll.*) 1912, Knowlton, Ia.
- Parmenter, Derric Choate, A.B. 1913, E. Gloucester
- Parsons, Robert Percival, S.B. (*Univ. of Wisconsin*) 1915, Chicago, Ill.
- Paul, Benjamin Delos, S.B. (*Purdue Univ.*) 1912, Brookston, Ind.
- Pennell, Walter Johnson, A.B. (*Bates Coll.*) 1913, Auburn, Me.
- Persons, Carl Clough, A.B. (*Wesleyan Univ., Conn.*) 1913, Maynard
- Rosenberg, Nathan, A.B. (*Univ. of Kansas*) 1915, Kansas City, Mo.
- Saeger, Ernest Tirrill, S.B. (*Dartmouth Coll.*) 1914, Brookline
- \*Shirley, John Newton, So. Duxbury

\* Admitted on two years of college work.

## ANNOUNCEMENT FOR 1917-18

The next session of the Medical School begins September 24, 1917. All students are required to register at the Dean's office on this day. Students registering in the Medical School for the first time will meet in the Amphitheatre in the Administration Building of the Harvard Medical School, on Monday, the 24th of September, at 10 A.M. Students desiring to enter the Harvard Medical School in the first-year class, or with advanced standing, should file an application blank, which can be obtained from the Dean's office, on or before July 1st, 1917.

### CALENDAR

#### 1917.

- Sept. 12, Wednesday.* Examinations begin for applicants for advanced standing, and for men previously conditioned.
- Sept. 24, Monday.* **Academic Year begins.** Registration of Students. Payment of the first instalment of the tuition-fee is required on or before this date.
- Oct. 12, Friday.* Columbus Day: a holiday.
- Nov. 29, Thursday.* Thanksgiving Day: a holiday.
- Dec. 10, Monday.* Last day for receiving applications for the Cheever, Haven, and Hayden Scholarships.
- Dec. 28, Friday.* Last day for receiving dissertations for the Boylston Medical Prizes.

RECESS FROM DEC. 23, 1917, TO JAN. 2, 1918, INCLUSIVE

#### 1918.

- Jan. 14, Monday.* Last day for receiving applications from students in the Professional Schools to be qualified for the degrees of Ph.D. and A.M. in 1918.
- Jan. 28, Monday.* Mid-year Examinations begin.
- Jan. 29, Tuesday.* Payment of the second instalment of the tuition-fee is required on or before this date.
- Feb. 1, Friday.* **Second half-year begins.**

- Feb. 22, Friday.* Washington's Birthday : a holiday.  
*April 2, Tuesday.* Last day for receiving dissertations for the Bowdoin Prizes.

RECESS FROM APRIL 15 TO APRIL 21, INCLUSIVE

- May 1, Wednesday.* Last day for receiving dissertations for the Dante, Toppan, and Sumner Prizes.  
*May 1, Wednesday.* Last day for receiving applications for the Bullard Fellowships and the Moseley Travelling Fellowships.  
*May 1, Wednesday.* Last day for receiving applications for Scholarships for 1918-19 (except the Cheever, Haven, and Hayden Scholarships).  
*May 1, Wednesday.* Last day for receiving applications of candidates for the degree of M.D. in 1918.  
*May 30, Thursday.* Memorial Day : a holiday.  
*June 1, Saturday.* Examinations begin.  
*June 20, Thursday.* Commencement.

SUMMER VACATION, FROM COMMENCEMENT TO SEPTEMBER 22, INCLUSIVE

- Sept. 11, Wednesday.* Examinations begin for applicants for advanced standing, and for men previously conditioned.  
*Sept. 23, Monday.* **Academic Year begins.** Registration of Students. Payment of the first instalment of the tuition-fee is required on or before this date.  
*Oct. 12, Saturday.* Columbus Day : a holiday.  
*Nov. 28, Thursday.* Thanksgiving Day : a holiday.  
*Dec. 9, Monday.* Last day for receiving applications for the Cheever, Haven, and Hayden Scholarships.

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